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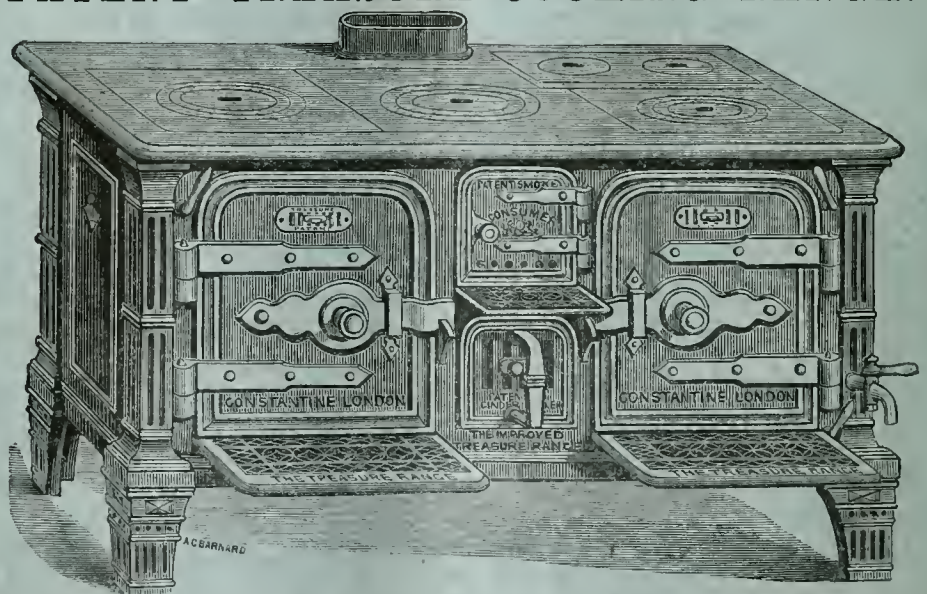

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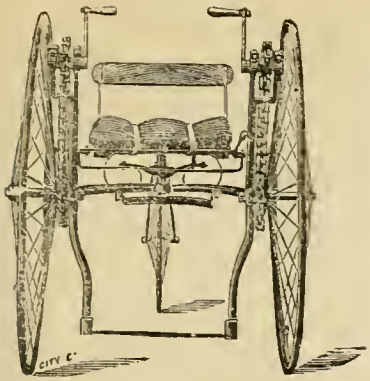

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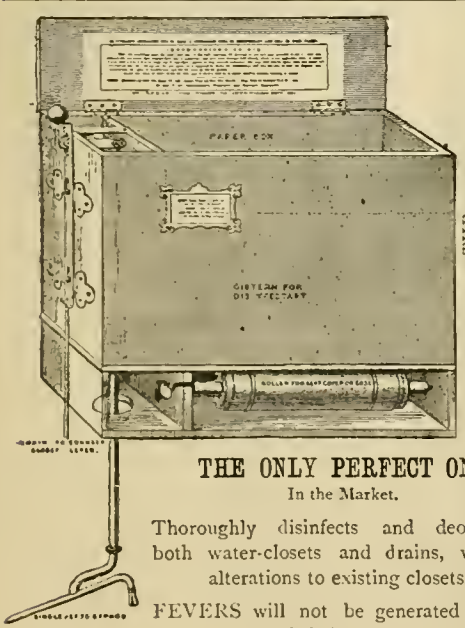

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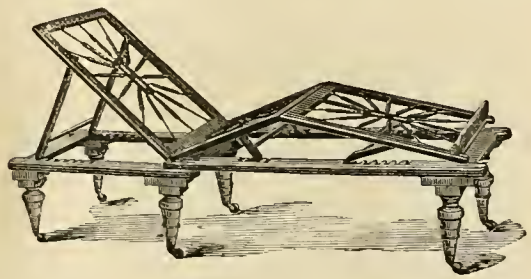

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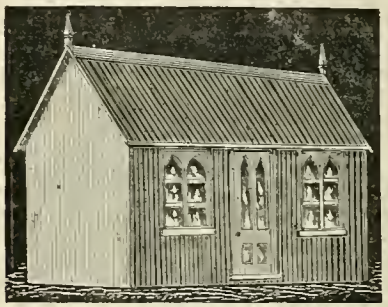

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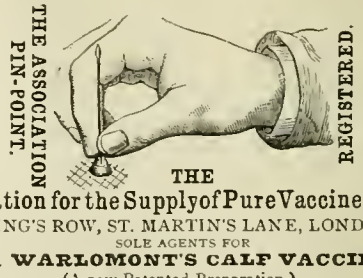

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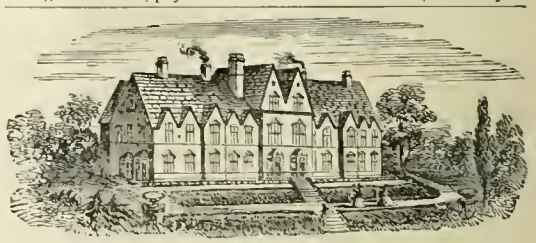

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'On the occasion of two of the most recent Parliamentary elections, I was hurriedly applied to by candidates for references to the sources from which to answer their anti-vaccinating persecutors. Members of Parliament and magistrates are, indeed, often at their wits' ends to know where to find the true facts which these gentlemen delight to misrepresent.

'I have, of course, been able to refer inquirers to the standard works on the subject, and to the Registrar-General's statistics: but a need evidently exists for some concise statement of the merits of vaccination, which will obviate the necessity of individual research into the evidence in its favour. As a matter of fact, I have not been able to refer my inquirers to any such statement, and it seemed to me, therefore, that there would be great advantage in the truth about vaccination being placed before the public in a handy and readily accessible form, so as to supply the materials for an answer to the numerous objections of the anti-vaccinators. Under these circumstances I consented, at the request of the National Health Society, to deliver a public lecture on the subject. This lecture was given at the Hall of the Society of Arts, on Jan. 27 last, and is now, in compliance with very numerous requests, printed (with considerable additions) in the present pamphlet.'

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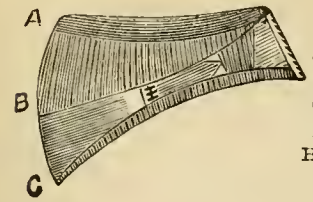

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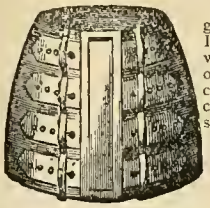

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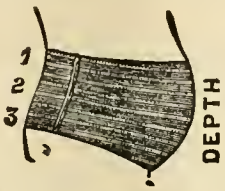

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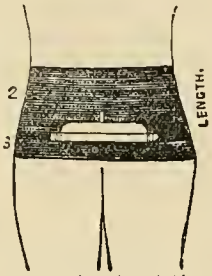

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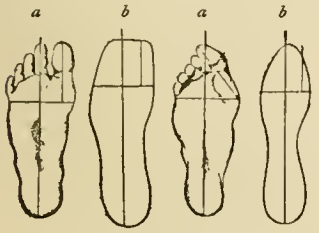

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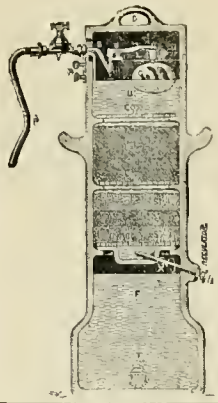
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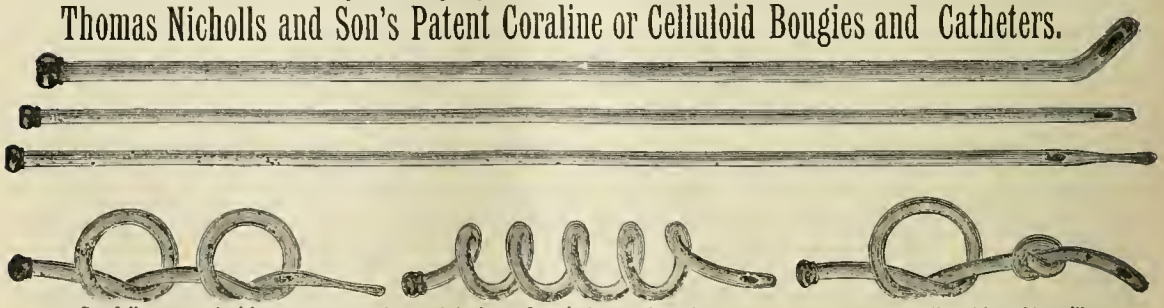

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"New York Medical Journal," *August* 1880, Dr. F. Weir,
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The London Medical Record.

Article 90.

FENGER ON THE THORACOPLASTIC OPERATION OF ESTLANDER.

Dr. Christian Fenger, of Chicago, discusses in a recent original article (*The Medical News*, Nov. 13, 1882) the treatment of those empyema-cavities where the rational operation has been performed in good time, where antiseptic dressings, accompanied by thorough drainage and washing out with the various disinfectant and alterative fluids, have been used; in short, where all other possible means have been exhausted, but the lung will not expand any more, the thorax cannot sink in any more, and there is no tendency in the cavity to become obliterated. The only way to close an empyema-cavity in this condition is to effect by an operation more or less complete contact of the walls of the cavity. As it is not in the surgeon's power to act upon the internal or pulmonary wall of the cavity, nothing is left but to obviate the rigidity of the wall of the thorax by taking away from the ribs covering the cavity, pieces as large and as many as may be necessary to effect a further sinking in of the thoracic wall, and sufficiently extensive to bring the latter into contact with the surface of the lung.

A case is reported of a girl aged sixteen, who, after an attack of empyema, which had been treated by repeated aspiration, suffered for a year and a half from a fistulous opening situated two inches and a half below and half an inch to the outside of the right nipple, between the sixth and seventh rib. Through this a probe could be passed upwards and backwards for about six inches, into the empyema-cavity. The amount of discharge was from one and one-half to two tablespoonfuls daily. As no improvement followed a prolonged trial of antiseptic injections, Dr. Fenger resolved to try the thoracoplastic operation as a last resort to effect the closure of the cavity and arrest the suppuration. He removed seven centimetres of the sixth, six centimetres of the fifth, and six centimetres of the fourth rib, in the right axillary region, over a transverse cavity two inches long, an inch and a half high, and about an inch in depth. The effect of this operation, namely, the closure of the cavity and fistula, was very prompt, taking place in fifty-four days after the operation. The immediate result of the operation was plainly to be seen in a remarkable sinking in of the thoracic wall in the region of the nipple, where the antero-posterior diameter of the chest was lessened by an inch and a half.

During the past twenty years, excision of a portion of rib has frequently been practised in order to afford access to an empyema-cavity, and to avoid trouble in keeping the fistula open. Simon, in 1869, was aware of the fact that, after resection of a rib for empyema, the cut ends of the bone soon approached each other; and in 1872, Heineke proposed to remove a portion of rib over a fistula as a means of diminishing the size of the empyema-cavity. To Estlander belongs the undisputed merit of having systematised the operation, and of having extended it to the resection of as large a number of ribs as the size of the cavity might require.

This operation is indicated in cases of intractable empyema-cavities that have resisted all other treatment. Estlander, however, strongly advocates that it should not be made early, as he considers it a *conditio sine quâ non* for a beneficial result of this plan of treatment, that both the pulmonary and costal layers of pleura have been transformed into a thick layer of firm connective tissue. The most suitable time for the operation in proper cases, according to this view, would be from six to eight months after the beginning of the disease. Dr. Fenger seems to hold that it might be appropriate to operate somewhat earlier, as it has been stated that, the earlier the empyema operation is performed, the more quickly will the fistula close in favourable cases; and it is evident that the thoracoplastic operation is liable to be more effectual when the layer of connective tissue covering the lung and the wall of the thorax is of moderate thickness, instead of being firm, hard, thick, and unyielding in any direction. As contra-indications, advanced pulmonary tuberculosis, albuminuria, and extreme debility of the patient naturally have to be considered. Of the first two named, albuminuria from amyloid affection of the kidney is probably the most important, as such patients are liable to succumb to the shock of even a not very serious or prolonged operation. As to the third contra-indication, a debilitated condition of the patient, Estlander has shown that, in patients emaciated almost to a skeleton, and so weak as to be capable of taking only a few steps, the operation causes very slight transitory derangements in the general condition, and that the slight fever and pain caused by it cease in a few days, and are followed by a remarkable and almost continuous improvement.

In some remarks on the operation itself, Dr. Fenger points out that in deciding upon the plan in each special case the first consideration is naturally the shape and size of the cavity; and the plan will be essentially different when the cavity has its greatest length from above downwards in a perpendicular direction, and when its direction is transverse from before backwards. A longitudinal cavity covered by five, six, or seven ribs, and not extending from the sternum to the vertebral column, but occupying only part of the thoracic cavity, will usually have the greatest depth in the axillary and infra-axillary regions, and will require the resection of small pieces—that is, each from two to six centimetres—of a large number of ribs. The first and second ribs are, as a matter of course, so inaccessible and also so near the large vessels that they are out of the question with regard to resection. A transverse cavity, it is stated, requires the resection of a large piece of one rib or of each of a few ribs. As to the length of these pieces, Homén, from a rather theoretical point of view, by mathematical deductions, gives the rule that there should be resected of each rib a piece, the length of which is equivalent to the greatest distance between the inner surface of this rib and the pulmonary surface of the cavity. Consequently, of several ribs covering the cavity, the largest piece will have to be resected from the rib extending over the middle of the cavity. According to Dr. Fenger these theoretical deductions will, in the main, be found practically applicable. For the excision of long pieces of two or three ribs, one single incision parallel to and either between the two or along the middle rib of three, will give

sufficient space for the removal of the pieces, especially in cases where the ribs are closely approximated. For the excision of small pieces of a large number of ribs, it is best to make several incisions parallel to and above each other in the intercostal spaces, each incision permitting the excision of two ribs. Through each incision in the skin, the periosteum is divided along the external surface of the rib and stripped from the bone by a common gouge. As a matter of course, the rib should not be denuded of periosteum beyond the limits of the part that is to be excised. The hæmorrhage, it is stated, is always insignificant. If the cavity be small and the walls sufficiently firm, it may be well to remove the soft suppurating layer of granulations with the sharp spoon, provided the cavity is so situated that no important organs are thereby endangered. If the thoracoplastic operation be sufficient to produce perfect approximation of the walls of the cavity, this proceeding might result in closure by first intention. A counter-opening into the cavity through the posterior wall of the thorax is desirable, if not necessary, if the cavity be of considerable size. The external wound should be united, cleansed, and dressed antiseptically. W. JOHNSON SMITH.

ARTICLE 91.

KOLOMNIN ON IGNIPUNCTURE IN GRANULAR AND SUPPURATIVE ARTICULAR AFFECTIONS.

PROFESSOR S. P. KOLOMNIN, of St. Petersburg, gives (*Mediz. Obozr.*, February 1882) an important and elaborated paper on the ignipuncture of inflamed joints, based on the careful study of seventeen cases of his own, in fourteen of which there existed non-suppurative granular inflammation with granular infiltration of the soft structures around the joints, and more or less considerable enlargement and chronic periostitis of the epiphyses. Of three other cases, two were those of granular inflammation of the knee and ankle joints, with suppuration and caries of the articular ends of the bones; and one of caries in an ankylosed knee. All these cases were treated by ignipuncture, which the author (who has practised this method since 1880) at first performed by means of a galvano-cautery, afterwards mostly by means of Paquelin's thermo-cautery; but always under chloroform, and with the strictest possible Listerian precautions. The latter he puts forward as a condition *sine quâ non* not only for the successful results of the whole treatment, but also for the safety itself of ignipunctured patients.

He describes the following four varieties of the operation. 1. In superficial ignipuncture, the thermo-cautery more or less deeply burns only granular infiltrated soft tissues around the joint. 2. The thermo-cautery penetrates through the entire thickness of the infiltrated soft tissues to the bone, and cauterises only its inflamed cortical layer. 3. The thermo-cautery burns through integuments, granular-infiltrated soft parts, and osteoporous cortical substance, and enters more or less deeply into the spongy bone-tissue. 4. After preliminary trephining of the compact tissue of an epiphysis, the thermo-cautery, being introduced through the opening thus made, cauterises the marrow and the epiphysal spongy substance.

As to the number of punctures, the author made in the first two varieties as many as five to twenty, and in the third from one to two, three, or, in case of the knee-joint, to eight and ten. The joint operated on (and the whole extremity) was covered with a thin layer of carbolised or salicyclic wadding, and fixed by means of a plaster of Paris bandage. In the majority of the cases the dressings were changed three times, at intervals of ten or twelve days; and by the end of a month or so all the punctures were usually found healed.

The results of this method of treatment are enumerated as follows. 1. Granular infiltration considerably diminishes, and that in far greater degree than under the influence of energetic painting with tincture of iodine within an equal period. 2. The size of the articular extremities affected by osteitis diminishes (though not always very considerably). 3. Pressure on the periosteum ceases to produce pain; this depends on the diminution or complete cessation of the periostitis constantly accompanying osteitis of the spongy tissue of the epiphysis. 4. All active and passive movements become painless. Generally the final (conservative) results of ignipuncture are so satisfactory, that the author does not hesitate to claim for this method a most conspicuous place in the treatment of granular articular inflammations; in regard to many cases he places this operation higher than the actual cautery, extension, immobilising bandage, and tincture of iodine.

The beneficial influence of ignipuncture is explained thus. 1. Ignipuncture gives rise to an acute traumatic vasculo-granular inflammation, with a great tendency of the granulation-tissue to cicatrisation, that is, to transformation into durable connective tissue, and to osteosclerosis; and in this way entirely changes the nature of chronic granular inflammation of a joint. 2. Ignipuncture acts as a derivative. 3. The operation establishes channels in the compact layer of an epiphysis, and so diminishes the intra-osseous pressure, augmented in every case of epiphysal granular inflammation. 4. It involves absolute rest of the limb operated on, which is required for the healing of punctures.

In conclusion, Professor Kolomnin lays down the following indications for the operation. 1. During the period of growth of the skeleton, ignipuncture is indicated in all cases of granular inflammation of the knee-, ankle-, elbow-, shoulder-, and wrist-joints in which enlargement and tenderness of the epiphyses are present. The longer the disease has existed, the more strongly immediate ignipuncture is indicated. The operation is indicated, also, in many cases of granular inflammation of the hip-joint—viz., in those in which the disease originates at the femoral epiphysis (*coxitis femoralis*). 2. In the subsequent periods—that is, after the growth of bones has been completed—the treatment by iodine and immobilising bandage at first may be tried, and then ignipuncture performed. In older cases, however, and especially in the subacute stage of articular inflammation, any considerable loss of time will be injurious. 3. Ignipuncture is the best means available in cases of osteitis of the foot and wrist, often observed in children. 4. Tuberculous osteitis and tuberculosis within the medullary canal of the diaphysis indicates ignipuncture, an opening having been just made in the compact bone-substance. 5. Ignipuncture is indicated, also, in cases of slight caries carnosa (*seu* fungosa) of the epiphyses. As the author's experience proves, the best results may be expected in those more or less acute forms of

vasculo-granular inflammation of the joints which present, amongst other symptoms, pain in movement and tenderness of the articular ends of the bones. The results are rather less favourable in granular inflammations originating in the synovial membranes and presenting an extremely chronic course, with absence of pain and tenderness and all acute phenomena. V. IDELSON, M.D.

ARTICLE 92.

SEGOND ON MODIFICATIONS IN THE CALIBRE OF VESSELS IN THE STUMPS OF AMPUTATED LIMBS.

AN interesting study of the modifications of blood-vessels after amputations is the subject of a paper by M. Paul Segond in the August and September numbers of the *Revue de Chirurgie*. His studies were suggested by the work of Professor Verneuil on the same subject, and were carried on by comparisons of the vessels of the stump with the corresponding vessels of the opposite or unmutilated limb. Injections were made, for the arms, from the arch of the aorta, for the lower limbs from the abdominal aorta. The observations were made upon the dead bodies of individuals who had been subjected to operations of very different extent, from partial amputation of the foot or hand to removal of the upper arm or of the thigh. In all cases a notable diminution in the calibre of both arteries and veins was found, even when the part removed represented but a small portion of the limb. The diminution was not confined to the immediate vicinity of the operation, but included the vessels of the whole limb, and extended, in an amputation of the fore-arm, to the subclavian, and in an amputation of the leg to the iliacs. This diminution was found in every case submitted to careful comparative examination. The small number of vessels to be tied in a reamputation of an old stump is adduced as a clinical fact which confirms the result of the dissections; and observations are quoted which show the temperature of the amputated limb to be markedly below that of the corresponding member.

The observations were made on limbs after the lapse of very varying periods of time after amputations; and the diminution is shown to be a very early phenomenon, too early to be considered an effect of the atrophy of the soft parts of the stump. In fact, the diminution in the size of the blood-vessels probably plays an important pathogenic part in the atrophy of the limb. Direct experiment upon a dog showed that two months after the amputation of the thigh the gluteal muscles of the two thighs were of equal weight, while the iliac and femoral arteries of the amputated limb were markedly smaller than those of the other.

One of the most interesting of the dissections was made in a case of amputation of the left fore-arm. The muscles of the shoulder of the amputated arm weighed 316 grammes less than the corresponding muscles of the other side. The skeleton also presented well-marked modifications. The two clavicles were alike in dimensions, but the right weighed 4 grammes more than the left. These figures have only a relative significance, however, as the bones of the right arm weigh normally, in right-handed persons, more than the left. The proportion of compact and spongy tissue was not the same in the two sides; there was in the left clavicle a marked diminution in the compact tissue. In the same patient, the scapula of the left side was 12 grammes lighter than that of the right. The axillary artery was diminished by one-fifth: the radial at its origin had lost nearly one-half of its diameter. The difference is always spoken of as a loss on the part of the amputated limb; the question very naturally arises, how large a proportion of the difference is due to increase on the part of the limb which is obliged to do an increase of work because of the mutilation of its fellow.

ARTICLE 93.

CROMBIE ON THE FUNCTION OF THE MEMBRANA FLACCIDA OF THE TYMPANIC MEMBRANE.

MR. JOHN M. CROMBIE, in an interesting paper on this subject (*Nature*, Dec. 7, 1882), first points out that the membrana flaccida (Shrapnell's membrane) is loose, and only very slightly attached to the bone, which at this part is smooth (margo tympanicus), but is mainly fastened to the skin of the canal; whilst, on the other hand, the lower portion of the tympanic membrane is firm and transparent, and fixed round its whole circumference to the sulcus tympanicus. After considering the characters of the skin lining the meatus, the author concludes that 'from the membrana flaccida of the membrane, which is easily movable at its margin, there is a piece of movable skin running over a smooth polished surface along the whole upper meatus of the bone, which is here bevelled off, and is immediately continuous with the movable membranous roof of the cartilaginous portion of the external passage. The movable piece of skin serves after its manner the purpose of a tendon, and the muscle which mainly plays upon it is attached to this upper membranous wall, at its point of junction with the osseous meatus.' The muscle in question is the lateral portion of the occipito-frontalis—musculus epicranius temporalis—which is anterior to and smaller than the attollens aurem, which forms the remainder of the lateral portion. On contraction, it raises the membranous roof of the canal upwards and slightly forwards, making the movable patch of skin glide outwards, and so telling upon the membrana flaccida, which even in the adult is almost in a line with the upper wall. The muscle has no isolated voluntary action, but is brought into play when the eyebrows are forcibly raised by the action of the occipito-frontalis. The author states that its effect on the membrana flaccida is distinctly visible through the speculum when the occipito-frontalis is made to contract.

By bringing the membrana tympani into a more vertical position, the author considers that it causes it to assume a position more favourable for hearing. Mr. Crombie was led to make these observations in endeavouring to trace the connection between a box on the ear and rupture of the membrana tympani, and concludes that a smart blow on the side of the head, too often thoughtlessly administered by schoolmasters and parents in correcting children, may cause sudden spasmodic action of this muscle, and thus, through the mechanism described, rupture of the membrana tympani.—[The author appears to ignore the usual explanation of this accident by the sudden compression of air in the meatus, which must surely be an important factor.—*Rep.*]

E. CRESSWELL BABER, M.B.

ARTICLE 94.

ESKRIDGE ON INTRAVENOUS INJECTIONS OF AQUA AMMONIÆ FORTIOR IN A CASE OF SEWAGE-POISONING.

Dr. J. T. Eskridge publishes in the *Phil. Med. Times* the report of an interesting case. The patient, who had worked for five years as a sewer-cleaner without ever having experienced any unpleasant effects, and who was a muscular man thirty-six years old, went into a deep privy after having made the customary test of lowering a candle, which continued to burn brightly. Instantly on reaching the bottom he fell, overcome by the gas, which was believed to be either sulphide of ammonium or of hydrogen. At all events it was not carbonic acid gas, and the instance seems to show the danger of trusting to the light test in determining on the safety of entering such vaults.

As he fell, his body became almost entirely covered by fæcal matter, his mouth pointing upwards, but still so close to the foul matter by which he was surrounded that some of the more liquid contents of the well could easily gain access to his air-passages during laboured efforts at inspiration. He remained in this situation half an hour, when a rope was passed around his body, and he was hoisted from the well in an apparently lifeless condition. His rescuer was also very near losing his life, having just time to throw the rope round his companion, when he himself became insensible.

The patient was taken to the hospital, where he was found to have a high feeble pulse, great cyanosis, and frequent convulsions. Digitalis, brandy, atropia, and morphia were all injected hypodermically without effect, except that after the last two had been injected in the left arm the convulsions became nearly limited to that side, but were still very violent. At the end of one and a half hours he was apparently moribund, the respirations being sixty to the minute, of a puffing and jerking character, with tracheal râles, the pulse 200 and very irregular in volume, the convulsions and cyanosis intense and increasing. It occurred to the attendant that, in view of the state of the capillary circulation, the cardiac frequency might be due to clotting of blood in the heart, and that, if anything could be introduced into the circulation to change the condition of the blood and rouse the man's vital powers for a short time, he, being naturally strong, might be able to throw off the noxious influences of the poison. For this purpose, intravenous injection of ammonia seemed to be indicated. One of the superficial veins at the bend of the arm was exposed, and raised with the forceps, and there was gradually injected into it thirty-five minims of the undiluted stronger water of ammonia. (It was supposed at the time to be the diluted aqua ammoniæ.) The pulse was almost immediately lessened in frequency and increased in volume, but the stimulating effects soon began rapidly to pass away. Ten minutes after the first injection, thirty-five minims more were injected into the vein, and this was repeated every ten minutes, until one hundred and forty minims of the ammonia solution had been introduced into the blood. The character of the pulse was improved by each injection, the respiratory efforts becoming deeper and less frequent. The convulsive movements had by that time nearly ceased. Following the same indication, the injections were then continued every fifteen minutes, with careful watching of the effect. After the tenth injection the pulse was 128 per minute, and did not again rise. After the twelfth and last he was able to swallow stimulants and food, and in ten hours after his attack was apparently conscious, though he had no subsequent recollection of anything that happened that day. The next day he was walking about, feeling quite well, and had no further symptoms except slight nausea and occasional diarrhœa for a few weeks. There was a small abscess at the seat of the injection.

The author concludes that the action of the ammonia was twofold, preventing the tendency to heart-clot, and stimulating the respiratory centres in the medulla. In a similar case, he would dilute the stronger water with two parts of distilled water at a temperature of 110° F.

ARTICLE 95.

SANDERSON ON THE COMMUNICATION OF TUBERCLE BY INOCULATION.

Dr. J. Burdon Sanderson, in a series of elaborate papers published in the *Practitioner* during 1882, sums up at p. 423 of the second volume with the following conclusions.

1. The characteristic product of tuberculosis is not an aggregate of shrivelled particles of irregular form, but a tissue composed of lymph-corpuscles held together by a network of hyaline connective substance.

2. There is a close structural analogy between this tissue and that of certain follicular organs belonging to the lymphatic system, *e.g.* the follicles of Peyer, the ampullæ of the lymphatic glands, &c.

3. All the favourite seats of tubercle are naturally characterised by the presence of this tissue, which, from the analogy stated above, may properly be called adenoid.

4. The natural distribution of adenoid tissue in the body is in intimate relation with the lymphatic system. In the great serous membranes (which Von Recklinghausen's discoveries have taught us to regard as walls of lymphatic reservoirs) it forms sheaths round the blood-vessels, or masses of microscopical dimensions and irregular contour underneath the epithelium. In the solid viscera, it is distributed here and there in the course of the lymphatic channels.

5. In the peritoneum, tuberculosis primarily consists in the enlargement or overgrowth of these sheaths or microscopical masses of adenoid tissue; and consequently the tuberculous nodules which are formed have the same intimate structure and stand in the same anatomical relation to the vessels and epithelium. In the viscera, the essential lesions also consist not in new growth, but in overgrowth of pre-existing masses of adenoid tissue.

6. The primary local lesion in artificial tuberculosis, whether the cause be simple wound or specific inoculation, consists in the development at the seat of injury of granulations or nodules which have similar structural characters with those of adenoid tissue elsewhere, but cannot as yet be shown to be in relation with the absorbent vessels.

7. The first step in the dissemination of tubercle consists in its being absorbed primarily by the lymphatics (which convey it to the lymphatic glands of which they are tributaries), and secondarily by the veins. Having thus entered the systemic circu-

lation, it is distributed universally by the arteries. The serous membranes seem, however, by preference to appropriate it, and from them it extends by contiguity to the superficial parts of the organs which they cover.

8. The final stage of the process consists in the tertiary infection of the glands of each diseased organ, which glands consequently undergo enlargement and induration, and eventually become partially caseous. The enlargement is due to the multiplication of cells in all the tissues of the organ, but more particularly in the alveoli; the hardening to a process of fibrous degeneration; while the caseation consists in slow necrosis of the previously hardened and anæmic parts. From the first the gland is incapable of performing its functions, but it is not until induration commences that the absorbents of the organ to which it belongs are completely obstructed.

9. In the liver of the guinea-pig, and in some other organs, tuberculous tissue undergoes a fibroid degeneration and caseation, the results of which cannot be distinguished from those observed in the normal adenoid tissue of the lymphatic glands and of the spleen.

10. As regards the question of a *specific contagium* of tubercle, we think it very important to note that this is not as yet disproved by the facts of traumatic tuberculosis. It still remains open to inquiry whether or not injuries which are of such a nature that air is completely excluded from contact with the injured part, are capable of originating a tuberculous process. The results of the following experiments, undertaken at the instance of Mr. Simon with special reference to this question, seem indeed to suggest that they may not be so. Setons steeped in carbolic acid were inserted in ten guinea-pigs on September 24, 1868, each animal receiving two. At the same time, extensive fractures of both scapulæ were produced on five others, care being taken not to injure the integuments. No tuberculosis or other disease of internal organs resulted in either of the cases. The facts certainly point to the necessity of further investigation in this direction.

Richard Neale, M.D.

Article 96.

PARTZEVSKY ON A CASE OF PARACENTESIS AND INCISION OF THE PERICARDIUM.

Dr. A. Partzevsky (*Mediz. Obozr.*, March 1882) brought before the Moscow Physico-Medical Society a very interesting case of pericarditic effusion, treated by repeatedly performed tapping, and, finally, by incision of the pericardial sac with subsequent drainage. The patient was a street-hawker, aged 23, who four years previously had suffered from an attack of exudative pleuritis, followed by obliteration of the right pleural cavity, partial atelectasis of the right lung, chronic inflammation of its apex, and falling in of the corresponding supra- and infra-clavicular regions. Four weeks before admission, there had appeared pain and tenderness in the scrobiculus cordis, dyspnœa, fever, and later progressive emaciation and general weakness. On admission his skin was pale, his lips livid, pulse small, weak, 120, respiration 36; evening temperature 101·5°, morning 96·6. On the left side of the chest percussion detected dulness, which posteriorly extended from the lower angle of the scapula downwards, and anteriorly on the parasternal line from the second intercostal space of the seventh rib, while transversely the area of dulness extended from the left axillary line to the right mammillary. The apex-beat could be neither seen nor felt; the heart-sounds were faint but clear. Over the area of dulness, posteriorly, the respiratory murmurs and pectoral fremitus were considerably weakened; along the left axillary line there were heard moist *râles* and faint bronchial respiration. The cough was troublesome; expectoration was scanty, frothy, muco-purulent. Such were the signs which led the author to the diagnosis of pericarditic and left pleuritic effusion. The further course of the case was very remarkable. Soon after admission, there commenced progressive absorption of both exudations, the pericardial disappearing rather more rapidly than the pleural. Within six weeks all traces of pericarditis disappeared, and the heart's activity became quite satisfactory; as did also the patient's general state. But in the seventh week, in spite of the uninterrupted and energetic absorption of the pleural effusion, there again appeared dyspnœa, palpitation, weak and irregular intermittent pulse, 120, increase of cardiac dulness; in short, all the symptoms of a pericarditic relapse. The intensity of all these signs daily grew *pari passu*, with decrease of pleuritic accumulation; and on the sixty-third day (since admission), by which time absorption of the latter had been completed, the patient's state was as follows. The area of cardiac dulness again reached from the right nipple to the left axillary line, and upwards as far as the second rib; the cardiac region was bulged outwards; the apex-beat had disappeared; the heart-sounds were almost inaudible; the pulse was scarcely perceptible; respiration 52; there were extreme cyanosis and general weakness; swallowing was almost impossible. It was evident that the pericardial sac was again distended to the highest degree, and that the patient's life was threatened. Under these urgent circumstances, the author decided to remove pressure on the heart by means of tapping. Accordingly, after an exploratory puncture with Pravaz's syringe, which was performed in the fourth interspace within two inches from the sternum, the needle of a Dieulafoy's aspirator was introduced at the same point, and about 2½ pounds of brownish turbid serous fluid drawn off. This was immediately followed by great relief (pulse full, regular, 96; respiration 36; decrease of cyanosis; swallowing easier, &c.), which, however, lasted only three days. On the fourth day there appeared a rigor and rise of morning temperature to 102·7°, and on the sixth there once more developed all the signs of an enormous pericarditic re-accumulation. The symptoms of incipient œdema of the lung (on the eleventh day) were taken as an indication for a second tapping, which was made between the fourth and fifth ribs about an inch from the sternum. Only three ounces of pus could be removed this time, though the area of cardiac dulness measured 14 centimètres vertically and 18 centimètres transversely. On the next day after the aspiration had failed to relieve the patient, who rapidly grew worse, an incision into the pericardium (in the fourth interspace) was performed and two drainage-tubes inserted, through which an enormous quantity of pus escaped. The pericardial cavity was washed ou by a salicylic solution (1·300), and

Lister's dressing applied. During the next ten or fifteen hours he felt greatly better, but a sleepless night had utterly broken the remaining strength of the exhausted patient, and about thirty hours after the operation he died in a state of collapse.

The *post mortem* examination revealed that the pericardium, which contained three ounces of pus, was greatly thickened and covered with thick pseudo-membranes, the right ventricle hypertrophied, and the cardiac muscle in a state of fatty degeneration. Both lungs were universally adherent to the pleuræ, being also atelectatic and œdematous. The liver was pushed up to the fourth rib, and fixed there by adhesions with the diaphragm.

The author at some length discusses the [subject of operative treatment of pericardial effusions, and sums up his own views thus. 1. In a vast majority of cases the operation (that is, puncture and aspiration, and, if they fail, subsequent incision with drainage) is not attended with any danger. 2. It brings rapid relief, and its palliative usefulness is not denied even by the opponents of operative interference in similar cases. 3. In the absence of such complications as tuberculosis, cancer, organic changes of the heart, &c., the operative treatment of non-purulent pericardial effusions may prove successful in the majority of cases. 4. In cases of purulent pericarditis, it is perfectly justifiable to try an early operation, in order to prevent dilatation and fatty degeneration of the heart, which generally supervene here very rapidly.

[In the London Medical Record, April, 1881, p. 138-9, is to be found Professor Rosenstein's case, which is like the case above more than in one detail. See, also, Dr. Kummell's paper on paracentesis of the pericardium, *ibid.*, July 1880, p. 279-80.—*Rep.*]

V. Idelson, M.D.

Article 97.

GUROVITCH ON TUBERCULOSIS OF THE FAUCES AND PHARYNX.

The author's inaugural thesis (*St. Petersburg Dissertation*, 1882) is an interesting contribution to the study of the subject, and is based on a careful examination of eleven cases of his own, and of those found in literature. In common with Isambert and Mackenzie, Dr. T. Gurovitch admits, as a fact well established both clinically and microscopically, that tuberculosis may occur in the fauces and pharynx primarily, though in a vast majority of cases it is developed here only as a complication of advanced pulmonary phthisis. Examination of a patient suffering from primary faucial tuberculosis (and generally showing all signs of pronounced phthisical habit and broken health) reveals an extreme paleness of the mucous membrane, with yellowish tint, and intumescence of the soft palate, lateral walls of the pharynx, and glosso- and arytæno-epiglottidean folds, which present a grey tallow-like infiltration, and are as if strewn with sand. Over the whole faucial and pharyngeal mucous membrane there are scattered minute grey and yellow nodules, which at some spots form small heaps and patches, showing a tendency to ulceration. On the tonsils and pillars there are visible small shallow elongated ulcers, with greyish surface, surrounded by a reddish areola. The isolated erosions are almost invariably of equal size, but they tend to coalesce and to form extensive irregularly defined ulcerated areas. In some cases the whole posterior wall of the pharynx is occupied by a superficial ulcer of this kind. When the process deepens, these erosions are transformed into typical tuberculous ulcers with uneven bases, covered by atonic granulations and grey or yellow deposit, and with irregular ragged edges. In some rare cases the affection begins like common sore-throat, with considerable tumefaction and hyperæmia of the velum and pharynx, tubercles appearing only later. When faucial tuberculosis occurs in the course of pulmonary phthisis, there usually appear only very few typical ulcers (sometimes only one); but if the fatal issue approach slowly, they may lead to an extensive and deep destruction of tissue. Thus, in one of the author's cases, an ulcer spread on and perforated the hard palate. Not very seldom (in three of eleven cases) tubercles are developed in the fauces and pharynx very late (during the last days of a phthisical patient's life) and then are detected only *post mortem*. The author gives a detailed account of his histological investigation of numerous specimens taken from ten cases, and comes to the following conclusions. 1. In faucial and pharyngeal tuberculosis there occur tubercles of three varieties: the round-celled, epithelioid, and giant-celled. 2. The epithelial covering of mucous glands undergoes fatty and colloid degeneration, but takes no part whatever in the development of giant-cells and tubercles. 3. The subjacent muscles undergo interstitial inflammatory changes with fatty degeneration of muscle-substance. 4. Both glandular and muscular changes, as well as those in connective tissue, are of a diffuse character. 5. Beside Koch's bacilli, the presence of which in tuberculosis does not admit any doubt, there are found, amidst elements of tubercle and especially within giant-cells, some round micro-organisms, which also may play a *rôle* in the development of tuberculous process. [A case of miliary tubercle of the pharynx is reported in the London Medical Record, 1880, February, p. 65.—*Rep.*]

V. Idelson, M.D.

Article 98.

DONALDSON AND STEVENS ON THE INFLUENCE OF DIGITALIN UPON THE HEART.

Messrs. H. H. Donaldson, Fellow in Johns Hopkins University, and L. T. Stevens, have been (*Philadelphia Med. News*) conducting a series of observations upon the influence of digitalin upon the heart of the slider terrapin and the frog.

The results are derived from two groups of experiments. The first was carried on by Messrs. Warfield and Donaldson during the first five months of 1882; the second, which is simply a continuation of the first, has been carried on by Messrs. Donaldson and Stevens since October. Though they are not yet complete, we are able to give some of the results which have been obtained.

The first investigation was on the work of the heart, and the object was to determine whether the work done by the isolated heart was increased or decreased by moderate doses of digitalin. The heart of the slider terrapin (*Pseudomys rugosa*, Shaw) was used. Carefully isolating the heart from its connection with extrinsic nerves and the rest of the circulatory system, it was supplied with a continuous stream of blood under conditions of pressure and temperature as near the normal as possible. It

was then found that when the heart, beating normally, was treated with a small dose of digitalin, the work invariably decreased. The full account of these experiments was published in the *Studies from the Biological Laboratory of Johns Hopkins University*, Vol. ii., No. 3. The frog (*Rana mugiens*) was used instead of the terrapin; the same result, however, followed—*i.e.* the work done by the heart decreased under moderate doses of digitalin.

With a view to testing the influence of abnormal blood-pressures on these results, some experiments were made in which both venous and arterial pressures were varied within wide limits, but the work always decreased. To test the effect of aortic insufficiency, the cannula was pushed in the aorta down past the semilunar valves into the ventricle itself. Under these conditions the heart weakened very fast, but the only effect of digitalin was to decrease the work. A study of the separate beats of the frog's heart shows that the work at first decreases, because the excursion of the ventricle—the variation of capacity between diastole and systole—is somewhat decreased, the rate of the pulse being only slightly diminished. Later, the pulse is often retarded to half the normal rate, while the work has by no means decreased proportionally. This arises from the fact that the excursion of the ventricle is now much greater than is normal, and thus somewhat compensates for the diminished pulse-rate. In this latter case, the individual beats of the heart are very much strengthened.

To test the variation in form which takes place in the heart under digitalin, use was made of Roy's tonometer (*Journal of Physiology*, Vol. i., No. 6). By this means, one can determine whether the primary diminution in the excursion of the ventricle is due to a gradual shrinkage or to distension of the ventricular muscle. Experimenting with the isolated ventricle, the authors have always obtained evidence of a shrinkage—that is, the ventricle tends more and more to remain in the systolic condition. They have not yet been able to observe in these experiments the condition of the ventricle described above, where it beats slowly, but at the same time with an excursion much greater than normal.

The isolated auricles also shrink under the action of digitalin. This shrinking of the auricles can be directly observed in the heart of the terrapin without the aid of any apparatus, but in the case of the frog it requires the tonometer to make it plain. The variations in the volume of the whole heart have not yet been tried.

By moderate doses are meant, from ·0005 to ·002 gramme of the soluble German digitalin, mixed with 100 cc. of nutrient fluid. The drug used was prepared by Merck.

The bearing of these results can be briefly noted. Starting from the fact that there is a rise of blood-pressure under digitalin, it is evident that this rise is not due to the heart, because, under all varieties of conditions, the heart does less work. The rise must then be due to a narrowing of the arterioles, a view maintained by many, but on which as yet, no direct evidence can be offered. It appears, then, that digitalin is a drug by means of which we can maintain a high arterial pressure and at the same time reduce the amount of work done by the heart itself.

It is hoped in the course of the year to extend these observations to the isolated mammalian heart, and thus render the series of experiments complete.

Article 99.

BANTI ON SPLENIC ANÆMIA.*

Dr. Banti's work is a carefully written, though by no means exhaustive, monograph. The author deals only with that form of pseudoleukæmia in which the spleen alone is affected, the lymphatic glands being very little if at all altered. The work opens with a short historical account of this and the allied affections. Leucocythæmia, or, as the author (following Virchow) calls it, leukæmia, is divided into splenic, lymphatic, and the recently added myelogenetic form. Pseudoleukæmia, or Hodgkin's disease, is divided into splenic and lymphatic. The opinion of some observers that progressive pernicious anæmia was a myelogenetic form of pseudoleukæmia was found to be erroneous, by researches which showed that the changes in the medulla of the bones were secondary to the anæmia.

The materials the author has before him are not over-abundant. They are three cases observed by himself, in only two of which was a *post mortem* examination obtained, and a few cases related by other observers. The scarcity of material, however, is to a great extent atoned for by the care with which it is worked up.

The chapter on the pathological anatomy of splenic anæmia (as the author calls the splenic form of pseudoleukæmia) and the chapter on the nature and theory of the disease, are both full of interest. Though the histological changes in the spleen are not in any sense specific, they are, nevertheless, sufficient to distinguish the spleen of pseudoleukæmia from the spleen of leukæmia. In pseudoleukæmia (lymphadenoma, Hodgkin's disease) the changes in the spleen are: (1) atrophy and sclerosis of the Malpighian corpuscles; (2) instead of the fine and regular reticular gland-tissue of the healthy pulp, a network with small and irregular meshes, and large coarse filaments, fibrillated and ribbon-like. In leukæmia (leucocythæmia), on the other hand: (1) the Malpighian corpuscles are sometimes atrophied and sometimes hypertrophied, but in all cases the reticulum preserves its delicate and regular structure; (2) the network of the pulp is formed of very fine fibrils, with rather small and regular meshes.

For brevity, as well as to avoid confusion, the author proposes the term *hyperadenia* to denote the histological changes in the spleen in leukæmia, the adenoid tissue being increased without substantial alteration of structure. To the splenic changes in pseudoleukæmia, on the other hand, he gives the name of *fibro-adenia*, there being here not merely an enlargement of the filaments of the network, but a fibrous transformation of them.

The author has little to say about the etiology of the disorder. His account of the symptomatology does not call for any special remark. In fact, his definition of the disease sums up concisely the two chapters dealing with these subjects. 'Splenic anæmia is a malady characterised by a progressive oligæmia occurring without appreciable cause, which gives rise to grave disturbances of all the organic functions, to œdematous effusions, hæmorrhages, and irregular fever, followed almost uniformly by death, accompanied by well-marked swelling of the spleen, and frequently also of the liver; a swelling

* G. Banti.—*Dell' Anemia Splenica*. Royal 8vo. Pp. 70. Pubblicazioni del Reale Istituto di Studi superiori pratici e di Perfezionamento in Firenze, 1882.

independent of any previous morbid process, and unconnected with a leukæmic alteration of the blood.'

In a diagnostic point of view, splenic anæmia must be distinguished from carcinoma and hydatids, from amyloid degeneration, leukæmia, palustral cachexia, grave anæmia with enlargement of the spleen, enlarged syphilitic spleen, and enlarged spleen from cirrhotic liver. Only two of these have we space to glance at—palustral cachexia and anæmia accompanied with swollen spleen. Palustral cachexia is distinguished by its malarial origin and by the presence in the blood of pigment-granules, black, brown, or yellow brown, either free or contained in the protoplasm of the leucocytes. Anæmiæ with swollen spleen are of various classes. A severe, progressive, and fatal anæmia may occur in a person suffering from an enlarged spleen, due to malaria or other cause. In this case the diagnosis is impossible during life, and the nature of the disease can only be established by the histological characteristics of the affection. Again, the enlargement of the spleen may follow the anæmia instead of preceding it. In this case, the judgment must be suspended for a while. And then, if the spleen do not increase with the progress of the case, splenic anæmia may be excluded.

In regard to therapeutics, Dr. Banti has not much that is new. For mild measures he gives the weight of his opinion to arsenic, mercurials, and parenchymatous injections. He believes, however, that there is a great future for splenectomy in this disease. After analysing the recorded cases of the operation, he finds that in only four was the disease undoubtedly splenic anæmia. The four cases are those of Spencer Wells (1865), Péan (1876), Czerny (1878), and Franzolini (1881). And of these four only one case (S. Wells's) died. On the other hand, in cases of leukæmia, the operation was invariably fatal. He notes also that, whilst in lymphatic pseudoleukæmia the removal of the glands first observed to be affected does not stop the course of the disease, in splenic anæmia, which is of the same nature, the removal of the organ at fault absolutely cuts short its progress ; the difference in result being probably due to the more general diffusion of the disease in the lymphatic variety of the affection.

William R. Huggard, M.D.

Article 100.

DE WECKER AND GALEZOWSKI ON THE EXTRACTION OF CATARACT.

De Wecker, in the *Annales d'Oculistique* for November-December 1882, describes some recent improvements in his mode of cataract extraction. He thinks that the mechanical details of the well-known operation which he practises cannot be improved upon, but that by paying special attention to the occlusion of the wound, the removal from it of every particle of *débris*, and its direct disinfection, he can ensure an almost total absence of suppurative panophthalmitis. For the perfect occlusion of the wound he makes a short conjunctival flap, the careful arrangement of which at the end of the operation ensures rapid union, and perhaps also is the means of excluding germs.

For the disinfection of the wound he employs, previously to the commencement of the operation, a solution of boracic (4 per cent.) and salicylic (1 per cent.) acids, with which to carefully wash both the conjunctiva and the edges of the lids. He takes all instruments from the carbolic acid bath (2½ per cent.) as they are used, and finally he moistens the lips of the wound with a few drops of the same solution on his spatula. He finds that the carbolic acid acts with sufficient power to coagulate and decolorise the clots, but not to interfere with primary union.

For preventing entanglements of capsule and of iris, he recommends the reduction of the latter by means of his caoutchouc spatula. To ensure certainty that no fragments of capsule are left between the lips of the wound, he advises that every operation should be terminated under oblique illumination with artificial light. In this way he can readily distinguish the anterior capsule, which rapidly acquires a greyish tinge through access of aqueous humour to its internal surface from the unaltered posterior layer.

Galezowski, in the *Lancet* of January 20, 1883, also describes a new method of cataract extraction. He was moved to make some modification in the operation which he had previously practised—the modified linear extraction of Von Graefe—by the suppurations which occurred in about 5 per cent. of his cases, misfortunes against which ordinary antiseptic precautions seemed to be powerless.

From a statistical examination of nearly 1,000 of his cases of cataract extraction he has come to the conclusion that the best flap is one with puncture and counter-puncture, just within the transparent cornea, and with apex 2 mm. below the upper sclero-corneal junction. He opens the capsule with the point of the Graefe knife during his first incision, and finally, taking out the speculum, evacuates the lens through the pupil by gentle manipulation of the lids with the fingers. He never uses iridectomy, except where some special condition exists : as, for example, when the iris is torn during passage of the lens; where the latter does not present in the wound ; where the cataract is traumatic, and complicated with posterior synechiæ ; or where the bulging iris is cut during the first incision, &c.

It appears somewhat remarkable that the above-named two eminent authorities should have, as far as their statistics go, arrived at the same results by such different procedures. De Wecker's 366 extractions without suppuration have certainly the advantage in point of numbers over the parallel series of fifty-six operations that Galezowski has done by his new process. It appears more than probable that further statistics will modify the figures in both cases. Certainly, the cause of the absence of suppuration does not reside in the section, as this is so different in the two cases, and, on the other hand, so similar to those practised by some surgeons for many years in England, where it has been even coupled in many cases with the absence of iridectomy, with but the average success.

Nor can we with more certainty, in the case of De Wecker's operations, attribute it to the antiseptic precautions taken ; since we know that the use of the carbolised spray and, indeed, of antiseptic lotions generally, has been discontinued after full trial by the majority of ophthalmic surgeons.

Before we can become fully acquainted with all the causes of suppurative panophthalmitis, it will be necessary to collect from all sides statistics of all

cataract operations which have been followed by this dire result. Special attention must be given to cases where both eyes have been operated on at one or at different sittings. If, in the former case, we have to record one-sided suppuration, we shall be more readily convinced that such is due to some detail in the operation, whether in the position of the incision or in relation to the introduction of deleterious matter. Till then we must, while paying special attention to the teachings of our distinguished colleagues, each of us anxiously watch our own procedures and results. W. A. Brailey, M.D.

SURGERY.

RECENT PAPERS.

101. Garstang.—Urethral Caruncle. (*Brit. Med. Jour.*, Nov. 1882, p. 932.)

102. Dearden.—Caries of the Atlas and Axis. (*Lancet*, Oct. 1882, p. 568.)

103. Morris.—Rider's Sprain. *Lancet*, July 1882, 133.)

104. Barwell.—Boro-Glyceride in Surgery. (*Brit. Med. Jour.*, Aug. 1882, p. 361.)

105. Thomson.—Refracture of the Patella. (*Brit. Med. Jour.*, Aug. 1882, p. 358.)

106. Skirving.—Fatty Emboli after Fracture. (*Lancet*, Oct. 1882, p. 567.)

107. Barker.—On Varicocele. (*Lancet*, Sept. 1882, p. 521.)

108. Southam.—Excision of the Pylorus. (*Brit. Med. Jour.*, July 1882, p. 163.)

109. Dobson.—Amputation in Senile Gangrene. (*Brit. Med. Jour.*, July 1882, p. 129.)

110. Spanton.—The Immediate Cure of Inguinal Hernia. (*Brit. Med. Jour.*, July 1882.)

111. Cheyne.—Abortive Treatment of Gonorrhœa by Iodoform. (*Lancet*, Aug. 1882, pp. 175, 213.)

112. Ceely.—Dislocation of the Fifth Cervical Vertebra; Recovery. (*Lancet*, Oct. 1882, p. 619.)

113. Tait.—On Cholecystotomy. (*Brit. Med. Jour.*, Nov. 1882, p. 990.)

114. Bellamy.—Contracted Fingers. (*Lancet*, Sept. 1882, p. 439.)

115. Berridge.—Anæsthesia by Rapid Breathing. (*Brit. Med. Jour.*, Nov. 1882, p. 1038.)

116. Baudry.—Testis in Perinæo. (*Lancet*, Sept. 1882.)

117. Thelen.—Nephro-lithotomy in a Case of Ischuria. (*Centralbl. für Chir.*, No. 12, 1882.)

118. Bradford.—A Painful Affection of the Wrist. (*New York Med. Jour. and Obstet. Rev.*, July 1882.)

119. Heusner.—A Case of Wound of the Heart. (*Deutsche Med. Wochensch.*)

120. Wolfler.—Antiseptic Treatment of Cancer of the Tongue. (*Ibid.*, Band xxvi., Heft 2.)

121. Pfeilschneider.—The Antiseptic Treatment of Transverse Fracture of the Patella. (*Archiv für Klin. Chir.*, Band xxvi., Heft 2.)

122. Angelini.—Aneurism of the Brachio-cephalic Trunk Cured by Injections of Ergotin. (*Tenth Congress of the Ital. Med. Assoc.*)

123. Bigi, Prof. E.—The Second Pyloric Resection in Italy. (*Gazz. Med. Ital.*, Nov. 11, 1882.)

124. Poggi, Alfonso.—Physical Dilatation of the Pylorus. (*Ibid.*)

125. Heustis.—Injection of Carbonic Acid Gas in Intestinal Obstruction. (*Med. News*, June 3, 1882.)

126. Weir.—Treatment of Gangrene of the Intestine. (*New York Med. Jour. and Obstet. Rev.*, Oct.)

127. Allis.—The Cure of Hip-joint Disease. (*American Practitioner*, May 1882.)

128. Mariani.—Two Cases of Transfusion of Animal's Blood. (*El Siglo Medico*, Sept. 24.)

Art. 101. *Garstang on Urethral Caruncle.*—In the *Brit. Med. Jour.*, Nov., p. 932, is a paper on urethral caruncle, read by Mr. T. H. Garstang at the annual meeting of the British Medical Association at Worcester, in which, having called attention to the importance of this subject from the agony the patients are in who are afflicted with it, he stated that, besides the usual form, there also exists in some cases an allied disease, consisting of an extremely vascular and painful condition of the general lining membrane of the urethra, which may appear as a patch, or as a ring, or may involve the whole canal, without the existence of any visible tangible tumour or excrescence, yet exactly resembling ordinary caruncle in its symptoms, and in its entire resistance to all forms of treatment except the total destruction of the diseased part. A series of cases are described with their treatment, the latter consisting chiefly in the local application of nitrate of silver.

In the discussion that followed, Dr. Edis expressed the opinion that some of the cases described (those which Mr. Garstang took to be the unusual form of caruncle) were instances not of urethral caruncle, but of irritable or vascular conditions of the urethra, nitrate of silver being sufficiently powerful to allay this, but not being strong enough to destroy a true caruncle; and that a saturated solution of carbolic acid would have been found more serviceable, and its application less painful. Dr. Cullingworth also stated that Mr. Garstang's cases might possibly be irritated conditions of the urethra, the symptoms being aggravated by hysteria, and that in such cases he had found simple dilatation of the urethra to be most efficacious.

102. *Dearden on a Case of Caries of the Atlas and Axis.*—Dr. Dearden reports the following obscure case in the *Lancet*, Oct. 1882, p. 568. The patient, a man aged 42, with a history of having been accustomed to camp out frequently during eleven years' residence in Australia, and of having had a severe fall on the back, complained of acute darting pains up the left side of the neck, aggravated by movement and of a dull aching at the top of the head; two of the cervical glands were enlarged Subsequently his voice became squeaky, bilious vomiting occasionally occurred, and saliva dribbled from the right angle of his mouth. About six months after first coming under observation, he raised himself suddenly to a sitting position and immediately expired. At the necropsy, the chief morbid changes found were caries of the odontoid process; necrosis of the left lateral half of the atlas, the right half being represented by only small pieces of necrosed bone; the transverse ligament was absent. Death resulted from a sudden contraction of the sternomastoids. When the head was drawn forwards the absence of the transverse ligament allowed the odontoid process to slip backwards and crush the medulla against the posterior part of the foramen magnum. During life the diagnosis was thought to rest between aneurism of the basilar artery or abscess of the base of the brain; and he was treated at various times with counter-irritants, iodide of potassium, quinine, and sedatives. The patient expressed himself relieved most when taking a mixture containing gelsemium and quinine, and using a lotion composed of equal parts of chloroform, tincture of opium, belladonna, and aconite.

103. *Morris and others on Rider's Sprain.*—Mr. Henry Morris, in the *Lancet*, July 1882, p. 133, describes two conditions; one, which he terms the lawn

tennis arm, being a sprain of the pronator radii teres, a result of the back stroke frequently employed in that game; the second, the rider's sprain, which occurs much more frequently, resulting from the equestrian taking a sudden grip, because his horse makes some unexpected movement. It is essentially a sprain of the adductor longus, with sometimes rupture of a few of the fibres or effusion of blood into its substance. So frequent is this accident, that Mr. Hawksley, the instrument-maker, has seen ten such cases during the last winter. For it he makes a long web or leather strap, two or three inches broad, to pass round the thigh and pelvis like a spica bandage, the action of which is to restore power and comfort to the limb, which was previously nearly useless. Two cases are cited; in the first, there was effused blood which did not become absorbed, but formed a hard mass at the inner side and top of the thigh, looking like an exostosis or piece of the os pubis broken off.

On p. 134 Dr. Henderson relates a similar accident which occurred to himself in China, where it appears it is well known and treated in the same manner. In the number for August, p. 201, Mr. Jordan Lloyd describes a case in which the tendon of the adductor longus was completely ruptured from suddenly gripping the saddle while riding a restive horse. It was treated by firmly bandaging the limb from below upwards, the patient making a perfect recovery after a few weeks.

Dr. Innes states on the same page that during sixteen years' experience in a cavalry regiment he saw only three cases of rider's sprain, and that in his opinion it can only occur when the muscles are wanting in tone. He also questions Mr. Morris's theory as regards the lawn tennis arm, Mr. Morris never having met with it in racquet players, with whom the back stroke is frequently practised. He attributes it to the great weight of the lawn tennis bat and ball.

104. *Barwell on Boro-glyceride in Surgery.*—In the *Brit. Med. Jour.*, Aug. 1882, p. 362, is a paper by Mr. Richard Barwell on the advantages of boro-glyceride as an antiseptic as compared with carbolic acid. The disadvantages of the latter are chiefly that it is a poison, sometimes producing dangerous effects, but also that its mode of application by the spray-apparatus is at the best of times clumsy, and in country or military practice almost impossible from the difficulties of transport; whereas boro-glyceride can easily be carried about, and all that is required is to make a 5 per cent. solution of it in water, wash out the raw surface with this, and dress it with lint and bandages soaked in it; the dressings need only be changed once in every three or four days. Mr. Barwell cites twelve cases, in all of which the healing of the wound was marvellously quick; he has also used it as an injection into the bladder in cystitis, when it acted like a charm. The absence of a spray wetting everything during operating, the simplicity of arrangement, the ease and celerity of dressing the wound, render this compound particularly well adapted for military surgery and for practice in rural parts.

105. *Thomson on Refracture of Patella.*—Mr. William Thomson read a paper at the annual meeting of the British Medical Association in Worcester, reported in the *Brit. Med. Jour.* for Aug. 1882, p. 358, reviewing the treatment of fractured patella, and describing a remarkable and probably unique case of a man who had been treated for fractured patella in Amsterdam, and came under the late Mr. Amphlett's care three weeks afterwards. Mr. Amphlett, seeing that his limb was useless from the separation of the fragments, resected the broken fragments, and brought them together by stout silver wire passed through holes drilled in the ends of the bones. Bony union took place, but the joint became stiff. About a year afterwards this man caught his foot on a mat, and in the effort to save himself from falling, felt something snap, and fell. He was placed under Mr. Thomson's care, who found a great gaping wound running directly across the knee, the patella broken transversely, and the interior of the joint exposed. Resection of the knee-joint was performed with a very good result. The patella was found to be fractured nearly on the line of the old injury; the two pieces had united by bone for about two-thirds the distance across. Mr. Thomson points out that patients who have their patellæ united by sutures are peculiarly liable to stiff joints, and that in this condition a similar accident as that described may occur. In his opinion resection of the patella, though sometimes justifiable in old cases in which the fragments are far apart, is unnecessary and dangerous to limb and life in recent accidents.

106. *Skirving on Fatty Emboli occurring after Fractures.*—Mr. Scot Skirving reports a case in the *Lancet*, Oct. 1882, p. 567, of a man, aged 40, suffering from a compound fracture of both bones of the leg. The external opening was very small, and was dressed antiseptically. During the next day the patient, while talking to a man in the next bed, ceased to speak, and it was noticed that something had gone wrong. The pulse was 130 a minute, full and soft; respiration 24, regular; the face was dusky, the lips pale. He was unconscious. The rates of the pulse and respiration and the temperature gradually rose till he died, which happened early the next morning, the temperature rising after death to 105·8°. After death numerous punctiform hæmorrhages were found in the endocardium of the left ventricle and on the pleural surface of the lungs. Fat- and oil-globules were found in the vasa recta and different vessels of the glomeruli. The brain was not examined. Mr. Scot Skirving has observed two similar cases occurring in elderly women, culminating in dyspnœa and death. The only treatment he recommends is of a prophylactic nature—*i.e.* to avoid handling the part as much as possible, as any cases sufficiently severe to be diagnosed as being due to fatty emboli are beyond remedial agents.

107. *Barker on Varicocele.*—Mr. Arthur Barker records in the *Lancet*, Sept. 1882, p. 521, a new method he has used with complete success for the radical cure of varicocele. It was first suggested by the fact, that, having removed the enlarged right half of a thyroid gland with strict Listerian antiseptics, using seventeen silk and six catgut ligatures, the wound healed rapidly, and not one of either the catgut or silk ligatures have since come away, or given any evidence of their presence under the skin. Three cases of varicocele were operated on in the following manner. The skin and instruments were washed in a 5 per cent. solution of carbolic acid, and the veins tied with two silk ligatures, these being cut short, and allowed to slip back into the scrotum; no spray was used, but everything was freely sponged over with carbolised water. Only a trifling swelling followed. All three cases left the hospital in less than a fortnight, and though a year has elapsed,

have remained well ever since. The ligatures can be felt as small subcutaneous knots, giving absolutely no trouble to the patients.

108. *Southam on Excision of the Pylorus.*—In the *Brit. Med. Jour.*, July 1882, p. 163, Mr. F. A. Southam records a case of a patient suffering from the symptoms of cancer of the pylorus. As he was rapidly losing flesh, and the tumour, from its locality and mobility, was thought to be limited to the pylorus, it was considered a suitable case for operation. The tumour being exposed by a transverse incision, the pylorus was isolated from the large and small omenta, and was then excised, the opening in the stomach closed with twenty-one silk sutures, leaving a small aperture below, into which the duodenum was sewn, the abdominal cavity was then sponged out, and the external wound closed. The patient survived the operation only fourteen hours. At the *post mortem* examination, there was slight injection of the parts in the neighbourhood of the stomach, and a quantity of bloody serous fluid was found in the peritoneal cavity. The pylorus was entirely surrounded by the growth, which was a scirrhus cancer; the pyloric opening was so obstructed as barely to admit the tip of the finger. Mr. Southam attributes death to septic collapse, and will, if he be ever called on to do the operation again, introduce one or two drainage-tubes into the abdominal cavity through the external wound. This is the first time this operation has been performed in England.

109. *Dobson on Amputation in Senile Gangrene.*—In the *Brit. Med. Jour.*, July 1882, p. 129, Mr. Nelson Dobson reports a case of senile gangrene of the foot, for which he performed amputation with success. The patient, a male, aged 62, at the time of the operation appeared moribund from blood-poisoning, the result of absorption of septic matter from the gangrenous part. Two similar instances are mentioned; and from the success attending these, Mr. Dobson suggests that amputation might be performed, when the patient was not extremely aged, in which the pain was very severe, the gangrene rapidly spreading, and in which marked symptoms of putrid poisoning were manifesting themselves; but that amputation is not admissible if the patient's strength be fairly good, there being a hope of a line of demarcation forming, or when the pain is controllable by opium, and symptoms of septic poisoning are absent. Mr. Dodson insists on the use of antiseptic precautions in all cases, believing that that is just sufficient to turn the scale in favour of amputation.

110. *Spanton on the Immediate Cure of Inguinal Hernia.*—Mr. Spanton, in the *Brit. Med. Jour.*, July 1882, p. 125, gives the outlines of nine cases of inguinal hernia cured by operation, making a total of thirty cures out of thirty-four cases operated on. In each of the cases recorded as cured, the patient follows his usual occupation without wearing a truss or support of any kind. The only apparent alteration in treatment from the previous category of cases is in one in which a chronic catgut ligature was used; this, instead of being absorbed, remained hard and wiry, and, at the end of three weeks, being loose, was removed. The operation is most suitable in those cases occurring in young patients. One child, aged only five months, suffered from no constitutional disturbance, and made a good recovery. With such satisfactory results, Mr. Spanton deplores the usual advice given to a patient suffering from hernia to 'procure a truss,' which is, at its best, a source of constant anxiety to its wearer.

111. *Cheyne on the Abortive Treatment of Gonorrhœa by Iodoform.*—Mr. W. Cheyne reviews in the *Lancet*, Aug. 1882, 175-213, the various means of cutting short an acute attack of gonorrhœa, giving his experience as to the quickest method of bringing about this result. By the means usually recommended, the injection into the urethra of a solution of nitrate of silver, tannic acid, wine, &c., an attack of gonorrhœa generally lasts from four to six weeks, to say nothing of the agonising pain and inflammation usually caused by this supposed abortive treatment. Mr. Cheyne has found after long experience that, to bring an acute attack to the chronic stage as quickly as possible, the best means are the introduction into the urethra of a rod, made of eucalyptus oil, iodoform, and cocoa-butter, to be retained as long as possible, and the internal administration of copaiba; when the rod can no longer be retained, a solution of sulpho-carbolate of zinc is to be used as an injection. This not only cuts short the acute inflammatory type, but leaves the discharge in a condition very amenable to treatment, so that the patient gets rapidly well with suitable remedies.

112. *Ceely on Dislocation of the Fifth Cervical Vertebra; Recovery.*—Mr. Ceely, in the *Lancet*, Oct. 1882, p. 619, gives the notes of the following case. C.K. fell backwards from a hayrick on to the ground (a distance of between twenty and thirty feet), was picked up insensible and conveyed to the Bucks Infirmary. On admission, the patient was partially insensible, with complete paralysis of the upper and lower extremities, and breathing slightly abdominal; the pupils were equal but rather dilated. After a short time, the patient became more sensible, and complained of great pain at the back of the neck, with numbness of the arms and feet, and difficulty of breathing. Strict rest was ordered, and, for a time, the patient showed no serious symptoms, but after about an hour-and-a-half the man rapidly became worse, and the house-surgeon, Mr. Van Buren, saw that unless something were done at once he would shortly die, and a more careful examination discovered that the spinous process of the fifth cervical vertebra was very prominent. Getting a nurse to steady the patient's head, he placed his two thumbs on each side of the projection, and with the other parts of his hands, taking a firm grip of the neck above the clavicles, applied gradual pressure, whilst the nurse slightly elevated the head. The vertebra went in with a distinct snap, and all prominence disappeared. The patient at once became sensible, within two hours moved his arms and legs, had no rise of temperature above 100° Fahr., and made a rapid recovery.

113. *Tait on Cholecystotomy.*—Mr. Lawson Tait, in the *Brit. Med. Jour.*, Nov. 1882, p. 990, reports two more cases in which he has performed this operation. The notes of one case are given. The patient, a lady aged 28, had suffered many years from paroxysmal pain in the right side, associated with a tumour, which was considered by some to be a floating kidney, with a calculus in its pelvis. Mr. Lawson Tait, however, banished this idea from his mind, and diagnosed a distended gall-bladder due to occlusion of the duct by a gall-stone. He proposed an operation which, after some delay, was agreed to. The abdomen was opened by a vertical incision over the tumour, and the distended gall-bladder aspirated of about a pint of glairy mucus; it was then laid open, and about eighty gall-stones of small size (the largest weighing 15

grains) were removed chiefly by means of a curette. The wound was not dressed by Lister's method, and healed without any rise of temperature above 100·4° F., but a fistula remained. Within two months of the operation bile flowed freely from the fistula, showing that the occlusion of the duct had been overcome, and that the complete functions of the organ would be re-established by the closure of the fistula. The second case had only been lately operated upon, so that no notes are given.

113. *Bellamy on Contracted Fingers.*—Mr. Edward Bellamy, in the *Lancet*, Sept. 1882, p. 439, reports a case of a man who, having previously scratched one of his little fingers with a meat-bone, presented himself with the tip of the finger so tightly approximated to the palm that no force could separate it. The strong fibrous bands binding it down were divided, but they subsequently reunited, so that there was no good result from the operation. The man was then placed under an anæsthetic, and the whole of the cicatrix excised, and the tendon divided under antiseptic precautions. The finger was retained in a straight position by a steel spring carried up the dorsum and suitably attached to it. When the wound was healed, active and passive movements were commenced. This procedure brought about an excellent result, the finger being as straight as the others.

115. *Berridge on Anæsthesia by Rapid Breathing.*—Mr. Berridge, in the *Brit. Med. Jour.*, Nov. 1882, p. 1038, gives three cases illustrating the value of producing anæsthesia by rapid breathing. In one case he was unable to reduce a dislocation of the shoulder until he made the patient breathe hard and rapidly. The second case was a patient with an inguinal hernia which was not able to be reduced until rapid breathing had been employed. A third case was that of a youth of 18, who had dislocated the humerus, and nothing could be done in the way of reducing it until the rapid breathing was tried. Mr. Berridge adds that it is very hard to bring the patients up to 'concert pitch,' and that the surgeon must exert himself in showing the way how to do it, almost as much as the patient, in order to produce complete relaxation of the muscles.

116. *Baudry on Testis in Perinæo.*—Dr. Baudry reports in the *Lancet*, Sept. 1882, p. 454, having recently met with a case of the rare malformation in which the testicle, instead of passing into the scrotum, passes down into the perinæum. The subject of the deformity was a new-born child, in other particulars well developed and well nourished, but the right testicle was found two centimètres in front of the anus, and covered by normal skin. There was no sign of dartos on the right side of the raphe, which deviated to the right, where the testicle should have been. The great peculiarity of the testicle was that it was not movable, this not having been recorded in connection with other recorded cases. RICHARD NEALE, M.D.

117. *Thelen on Nephro-lithotomy in a Case of Ischuria.*—This case is reported by Dr. Thelen in the *Centralbl. für Chir.*, No. 12, 1882 (abstract in *Centralbl. für die Med. Wiss.*, Dec. 30, 1882). The patient, aged 27, who had been suffering from spasmodic stricture, became the subject, during an attempt at dilatation of the urethra, of an accidental fracture of an elastic catheter, a portion of which passed into the bladder. Violent inflammation was excited in the bladder, and an abscess formed in the left iliac fossa. The abscess, opened with antiseptic precautions, was behind the peritoneum and connected with the pelvis of the kidney. It was almost entirely healed within five weeks, when suddenly rigors and suppression of urine occurred. The catheter brought away only mucus and a small calculus. Destruction of the left kidney and closure of the right ureter by a calculus were diagnosed. Dr. Bardenheuer, as the only means of saving the patient's life, determined to remove the calculus; for which purpose an incision was made, extending from the eleventh rib to the crest of the ilium. In order to reach the pelvis of the kidney and the ureter, it was necessary to detach the anterior border of the kidney from its cushion of fat, by the hand. The instant that the stone was felt in the hilus it slipped back into the pelvis of the kidney, and the flow of urine through the ureter showed that the passage between the bladder and the kidney was free. In order to maintain this favourable position of the organ as long as possible, the kidney was drawn backwards and outwards, so that the pelvis was visible at the bottom of the wound. An incision was made into the commencement of the ureter; a calculus about the size of a bean and four smaller pieces were removed, and the operation was concluded by sutures in the edges of the incision in the ureter. The urine, however, passed not through the ureter, but by the wound. Four days later Dr. Bardenheuer determined (as the urine continued to trickle out) to divide the ureter, and to fix the upper end in the wound. One month after the operation the urine passed through this artificial ureter; the wound was uniting at parts where the urine did not come into contact; the patient, though feeble, was recovering.

118. *Bradford on a Painful Affection of the Wrist.* In the July number of the *New York Med. Jour. and Obstet. Rev.*, Dr. Edward H. Bradford, surgeon to out-patients, Boston City Hospital, relates three cases of a painful affection of the wrist, the features of which were: pain referred to or most severe at the middle of the carpus; slight swelling; an absence of constitutional disturbance, and no interference, or but partial interference, with motion of the articulation between the carpus and the radius and ulna. The symptoms were relieved by fixation, and recovery took place finally after a period of rest. Judging from analogy, Dr. Bradford remarks, it seems probable that the cases here reported were similar to a degree to a synovitis of the medio-tarsal joint, described by Gosselin under the term tarsalgia adolescentium; differing somewhat in their course from the fact that the wrist, a part easily immobilised from the first, and not the tarsus, was affected. Leaving out of account the smaller synovial membranes of the carpus—*i.e.* those between the pisiform bone and the cuneiform, the trapezium and the metacarpal bone of the thumb, the ulna and the fibro-cartilage at the joint—there are two large synovial sacs—viz., that between the main carpal bones and the radius and cartilage covering the ulna, and that between the main bones of the carpus, of which the os magnum is the larger and central bone. From the symptoms in the cases reported, the author thinks that the inflammation was one affecting this latter synovial sac, and limited to this alone, and that they may therefore be termed cases of synovitis of the carpus.

119. *Heusner on a Case of Wound of the Heart.*—Dr. Heusner (*Deutsche Med. Wochensch.*, and *Centralbl. für die Med. Wiss.*) relates the

case of a workman who had been stabbed with a knife-blade about six inches in length. The knife entered the chest about three-quarters of an inch from the nipple, and about two inches from the left border of the sternum. The patient immediately afterwards walked about fifteen steps, and remained for some hours without any variation in the heart's sounds or movements, except feebleness of the pulse. On the following day restlessness and difficulty of breathing came on, and death occurred sixty-three hours after the receipt of the injury. The necropsy showed the left pleura distended by the uninjured lung. The knife-blade had passed through the pericardium, and had pierced the anterior wall of the right ventricle, the puncture ending between the columnæ carneæ of the posterior wall. The puncture on the anterior was triangular and gaping, but on the internal surface it was slit-like, and more than an inch in length. The pericardium contained between five and six ounces of semi-coagulated blood. An old adhesion to the lung had prevented its escape into the pleural cavity. The left pleura, as also the right, which was uninjured, was filled with fluid blood. Death took place, the author considered, from gradual infiltration of blood into the pleuræ; and he further supposed it possible for the patient to have escaped with his life, had the old adhesion been firm enough to prevent subsequent effusion of blood into the pleural cavities.

W. B. Kesteven, M.D.

120. *Wölfler on the Operative Treatment of Cancer of the Tongue.*—Dr. Wölfler (Langenbeck's *Archiv*, Band xxvi., Heft 2) says that, from the year 1871 to the end of 1876, forty-two cases of carcinoma of the tongue were operated upon in Billroth's Clinic. Of these fifteen died (38·4 per cent.) in consequence of the operation. From 1877 to 1881 forty-five cases were submitted to operation; of these nine proved fatal (29·9 per cent.). All the patients were men. Out of 115 cases of cancer of the tongue treated at the Clinic, only four of the patients were women (3·4 per cent.). In cancer of the floor of the mouth, it was found that glandular enlargement took place in the submaxillary region, while in cases in which the tongue itself was affected, the retromaxillary glands were those implicated. It was also found that, in the treatment of lingual carcinoma by palliative measures, the average duration of life was thirteen to fourteen months, while by operative measures the period was lengthened to nineteen and twenty-one months. According to the estimation of authors the prognosis of cancer of the tongue, as regards immediate mortality, is not so unfavourable as in rectal carcinoma.

During the last three years Dr. Billroth's improved method of operating has been in vogue, and the statistics show that the fatal cases during that period amounted to 17·6 per cent., while in previous years the mortality was 32 per cent. The best proof of the utility of the present operative measures is, that many cases of widely spread disease of the tongue and floor of the mouth have remained perfectly well after healing was complete.

The steps of Billroth's method are as follows. Both lingual arteries are first ligatured; the mouth is then kept opened by a speculum, and all diseased teeth opposite the ulceration are extracted. The gum is next separated from the inside of the lower jaw with the raspatory. Excision of the floor of the mouth is then effected by means of scissors and forceps. The bleeding points are ligatured, and the tongue, being drawn forward, is finally extirpated. After the separation of the organ, permanganate of potash, either in powder or in watery solution, is applied to the wounded surface, and a drainage-tube, of the thickness of a finger, is inserted through the floor of the mouth. Through this the various discharges escape, and diphtheria of the mouth, cervical phlegmon, and broncho-pneumonia do not occur in such cases when properly drained. The patients are fed by means of a stomach-tube, until the drainage opening has quite closed.

The proceeding is not so severe as the methods of Langenbeck and of Regnoli and Czerny; and the immediate results of the operation are more favourable than by any other plan, viz.—84·2 per cent. of recoveries. The deaths were caused by septicæmia (acute or chronic) or by pyæmia. In seventy-one cases ten radical cures have been obtained (14 per cent.) by Professor Billroth; while in 373 instances of mammary excision, only fifteen radical cures have resulted.

121. *Pfeilschneider on the Antiseptic Treatment of Transverse Fracture of the Patella.*—Dr. Pfeilschneider (*Archiv für Klin. Chir.*, Band xxvi., Heft 2) describes the following case. A man, 35 years of age, of weakly constitution, sustained a transverse fracture of his right patella. Forty-eight hours after the accident, the joint was opened antiseptically by a longitudinal incision, all the coagula and *débris* removed, and the interior washed out with a 5 per cent. solution of carbolic acid. Two holes were then bored in each of the fragments, through which silver-wire sutures were inserted, and the bones approximated. Two drainage-tubes were then passed under the patella and made to protrude one on each side of the joint. The limb was then fixed in a splint. The eighth day after the operation, the leg could be freely raised, and, on the same day without permission, the patient made a trial step. No pain was experienced. On the twenty-first day the dressings were left off, as nothing but a small fistulous opening remained. The joint then presented a normal appearance, and could be extended as freely as on the sound side. The fragments of the patella were closely and firmly approximated, and during extension the leg and quadriceps moved in a normal manner. On the twenty-fifth day, the man was able to get about without pain. In seven weeks from the accident, he resumed his work as a locksmith. At the end of half a year there was no separation of the bone; flexion was also good, and, at the termination of a year, the leg could be bent to an angle of 70°, as compared with 75° on the sound side. The connecting wires could be felt covered by the skin, but they occasioned no inconvenience.

T. F. Chavasse, M.D.

122. *Angelini on Aneurism of the Brachio-cephalic Trunk Cured by Injections of Ergotin.*—The subject was one Raphael Beretti. One brother, 54 years of age, died of aneurism of the thoracic aorta, diagnosed thirty-four years before death; it gave him no trouble until the last few months of his life. Another brother died of chronic heart-disease (?); the father of anasarca. In the subject of this history there was developed slowly and unnoticed a diffused true aneurism of the arch of the aorta, of the brachio-cephalic trunk, of the subclavian and right carotid; to this succeeded a false sacciform aneurism of the brachio-cephalic trunk. The cure appeared hope-

less, but Dr. Angelini determined to try injections of ergotin, repeated twice a day for a week, then every two days, every three, every five, and so on for about three months. After four months, the aneurism was reduced to half, being hard and firm, and the patient was able to resume work. Dr. Angelini comes to these conclusions. 1. Certain aneurisms, even of arteries of large calibre, of slow growth, can exist unobserved by the patient for many years. 2. Chronic diseases of the arteries, of the cardiac valves, and of the endocardium, have an hereditary predisposition, and are not always due to the abuse of stimulants. 3. His case encourages us to try hypodermic injections of ergotin in all such cases, as well as in aneurisms of small arteries.

123. *Bigi on Resection of the Pylorus.*—The operation (*Gazz. Med. Ital.*, Nov. 11, 1882) was performed by Professor Bigi, in the Civil Hospital of Perugia, on a woman aged 38. Cancer of the pylorus was diagnosed by Professor Riva. The patient was much exhausted, and for some days had only taken food by the rectum. The operation was performed with antiseptic precautions, but the spray was not used. The abdominal parietes were incised to the right of the middle line; the tumour was exposed and drawn forward, with a good part of the stomach and duodenum, and was removed. Thirteen ligatures were applied; and, by a special suture, the stomach was reunited to the duodenum. Before commencing the operation, a hypodermic injection of morphia was given; the administration of chloroform was begun, but had to be suspended from the increasing debility of the heart's action. The operation lasted two and a half hours, and the patient bore it well. The temperature for a few hours in the evening reached 38·3° C. (nearly 101 F.). For the next three days (when the case was reported) it was normal, and all went well, giving every hope of a speedy cure.

124. *Poggi on Surgical Dilatation of the Pylorus.*—In an individual suffering from pyloric stenosis from a cicatrix, Professor Loreta, of Bologna, after having made an incision in the epigastrium, and opening the stomach, mechanically dilated the pylorus. The result was most successful, since, on the seventh day, the phenomena caused by the stenosis had disappeared, and the patient was going on well in every way. G. D'Arcy Adams, M.D.

125. *Heustis on Injection of Carbonic Acid Gas in Intestinal Obstruction.*—The *Medical News* of June 3, 1882, contains the record of a case of ileus treated by the above method, by Dr. Heustis, of Mobile. The patient, a woman recovering from an attack of puerperal fever which had lasted three weeks, was attacked with violent pain in the abdomen, and complete obstruction, accompanied on the second day by stercoraceous vomiting. Cathartics having failed to open the bowels, she was treated for seventeen days by the administration of anodynes and calomel (Morphiæ hydrochlor. gr. j.; extracti belladonnæ gr. ¼; hydrarg. subchlor. gr. ijss, every two hours; later 12 of these pills lasted two or three days), while poultices were applied to the abdomen, and enemata of soap and water, or ox-gall and water, were given daily. During this time she suffered much, sleeping for short periods only, and the stercoraceous vomiting continued. Nevertheless, the expression of countenance was good, the belly remained soft, and no spot could be localised as the seat of obstruction. On the seventeenth day, abdominal section was determined on, but sufficient aid was not to be had, and the next day the condition was such as to encourage the further trial of enemata; injections of ox-gall and melted lard were thrown up a tube eighteen inches in length but without effect. Dr. Heustis then got the husband to procure an ordinary seltzer siphon, and, this being connected with the long rectum-tube, the lever was depressed and the contents allowed to pass into the intestines. On the first day no result ensued, although the patient declared that some of the gas escaped into her mouth, but on the second trial, before the bottle was half empty, fæces began to escape by the side of the tube, and in a short time the bowels were completely relieved. After this, no further trouble was experienced, the bowels acting daily.

Notwithstanding the large amount of calomel administered, the patient was not salivated, probably from the fact that the majority of it must have been vomited up. No details are given as to the means taken to maintain the nutrition of the patient. Dr. Heustis considers the case as probably one of spasmodic ileus, although the symptoms might be as well explained by a diagnosis of obstinate constipation following puerperal peritonitis.

G. H. Makins.

126. *Weir on the Treatment of Gangrene of the Intestine.*—At a recent meeting of the New York Medical and Surgical Society (*New York Medical Journal and Obstetrical Review*, Oct. 1882) Dr. Weir raised the question of treatment in intestinal gangrene by relating the following case. About ten days ago a woman, aged 35, was seen by him in consultation. Her physician stated that on May 10 last she was seized with colicky pains and vomiting. Passing his hand over her abdomen, he could discover no hernial tumour, but, as there was apparently intestinal obstruction, he gave opium freely, and repeatedly administered enemata. After four or five days a free movement of the bowels took place, and she felt relieved. He discovered, the day before Dr. Weir saw her, a tumour in the left groin, and the patient then told him that this had first appeared, although temporarily, the preceding August. Dr. Weir found, on examination, that the tumour had all the signs of a stercoraceous abscess just below the femoral opening on the left side. On incising it, fetid pus and fæcal matter were discharged. The sphacelated portion of gut, about an inch long, was laid open freely, and, as the fæces had free vent, nothing further was done. The patient was entirely relieved, and the sloughing cellular tissue had since come away, leaving a fistula discharging biliary matter. Dr. Weir thought that an artificial anus in this locality would be more likely to heal than if it had been at the site of an inguinal hernia. He found that the statistics of resection of gangrenous intestine, as done by Czerny and Gussenbauer, gave only about 35 per cent. of recoveries. He asked whether it were better simply to slit up the strangulated portion of intestine, hoping that the artificial anus would heal of itself, or, as had more commonly been done of late, to remove the gangrenous portion, and unite the upper and lower healthy segments. He believed that the older method would be preferable in most cases, and that the resection would be suitable for gangrene, either where it was so recent as to be unguarded by adjacent adhesions, or was due to an internal strangulation.

127. *Allis on the Cure of Hip-Joint Disease.*—Dr. O. H. Allis read a paper before the Philadelphia County Medical Society on the above subject, of which the *American Practitioner* for May gives an abstract. Dr. Allis insists upon the necessity of preserving absolute immobility of the joint until the inflammation has completely subsided, even at the cost of ankylosis. He illustrates this point by relating three cases, in which he was induced to set up passive motion, after subsidence of the acute symptoms, in order to restore motion in the joint. The result, uniformly, was relapse, followed by death in two cases, with a very narrow escape in the third. In regard to position of the limb in fixation, he compares the disadvantages of the straight extension in sitting down with the flexion at a right angle for walking; and he concludes that a compromise between the two conditions on the whole presents least inconvenience. The shortening, which follows disuse and arrest of development, is regarded as an advantage by favouring locomotion.

128. *Mariani on Transfusion of Animal's Blood.*—Two cases of transfusion of animal's blood are described by Dr. Mariani, of Madrid, in *El Siglo Medico* of Sept. 24. In both, the mediate method was employed. The blood used was obtained by cutting the carotid artery of a kid; it was then defibrinated and injected into the median cephalic vein by means of Collin's transfusion-apparatus. The transfusion was performed in the first case for excessive metrorrhagia ten days after the patient, a girl twenty years old, had given birth to twins; in the second, for hæmorrhage from a sloughing scalp-wound. In both cases a temporary improvement is reported, but death occurred about thirty-six hours after the transfusion, preceded by severe rigors.

THERAPEUTICS AND PHARMACOLOGY.

RECENT PAPERS.

129. Patella.—Resorcin. (*Gazz. Med. Ital. Prov. Venete*, Oct. 14, 1882.)

130. De Renzi and Rummo.—Inhalations of Iodoform and Turpentine. (*Ibid.*, Oct. 7, 1882.)

131. Bareggi.—Special Indication for the Administration of Salicylate of Soda in Typhoid Fever. (*Gazz. degli Ospitali*, Dec. 3, 1883.)

132. Giné, Armenqué, and Aranjo.—Bicarbonate of Soda in Acute and Chronic Tonsillitis. (*União Med.*, Rio de Janeiro, 1882.)

133. Wasilieff.—The Influence of Calomel on Peptic Fermentation and the Vitality of Lower Organisms. (*Centralbl. für die Med. Wiss.*, Nov. 4, 1882.)

134. Jarisch. Pyrogallic Acid in some Skin-Diseases. (*Centralbl. für die Ges. Therapie*, Jan. 1883.)

135. Gilles de la Tourette.—The Hypodermic Use of Iodide of Potassium. (*Le Progrès Méd.*, No. 1., 1883.)

136. James.—On Dialysed Iron. (*Med. Times and Gazette*, Dec. 1882, p. 659.)

137. Post.—Large Injections of Nitrate of Silver in Chronic Dysentery. (*Lancet*, Dec. 1882, p. 936.)

138. Browne.—The Therapeutic Effects of Hyoscyamine. (*Brit. Med. Jour.*, Nov. 1882, p. 1030.)

139. Simpson.—The Action of Hyoscyamine. (*Brit. Med. Jour.*, Dec. 1882, p. 1148.)

140. Roden. The Brine-Springs of Droitwich. (*Brit. Med. Jour.*, Nov. 1882, p. 990.)

141. Elliott.—Chamomile Tea in Infantile Diarrhœa. (*Practitioner*, Dec. 1882, p. 426

142. Cauty.—The Internal Use of Chrysophanic Acid in Psoriasis. (*Lancet*, Dec. 1882, p. 935.)

143. Myers. —The Treatment of Rheumatism by Blisters. (*Brit. Med. Jour.*, Nov. 1882, p. 985.)

144. Ralfe.—Sodium-Nitrite in Epilepsy. (*Brit. Med Jour.*, Dec. 1882, p. 1095.)

145. Spender.—Local Application of Tannin in Erysipelas. (*Brit. Med. Jour.*, Dec. 1882, p. 1147.)

146. Fowlwort: a new Vegetable Styptic. (*Lancet*, Oct. 1882, p. 716.)

147. Hudson.—Eucalyptus Rostrata as a Remedy for Diarrhœa. (*Lancet*, Dec. 1882, p. 1029.)

148. Death during Administration of Dichloride of Ethidene. (*Brit. Med. Jour.*, Dec. 1882, p. 1267.)

149. Collier.—Croton-Chloral as a Soporific. (*Brit. Med. Jour.*, Dec. 1882, p. 1238.)

150. Couldrey.—Salicylate of Soda in Scarlatina. (*Lancet*, Dec. 1882, p. 1064.)

151. Harries.—Boracic Acid in Diphtheria. (*Lancet*, Dec. 1882, p. 1004.)

152. Wortabet.—Oil of Turpentine in Egyptian Endemic Hæmaturia. (*Lancet*, Dec. 1882, p. 979.)

153. Read.—Gelsemium Sempervirens in Tetanus. (*Brit. Med. Jour.*, Dec. 1882, p. 1245.)

154. Wilson.—Curative Effect of Chloral in Albuminuria. (*Brit. Med. Jour.*, Dec. 1882, p. 1247.)

155. Saveljeff, M. V.—On the Therapeutic Use of Clay. (*Vratch*, 1882, No. 16, pp. 261-2.)

156. Schnaubert.—On a Case of Graves' Disease treated by Milk-Diet. (Botkin's *Ejenedeln. Klin. Gaz.*, 1882, No. 13.)

157. Kaczynski.—On Petroleum in Small-pox. (*Przeglad Lekarski*, 1882, No. 13.)

158. Banatvala. -The Use of the Syzygium Jambolanum in Diabetes. (*Midland Med. Miscellany.*)

159. Duval. Turpeth Mineral in Croup. (*Philad. Med. and Surg. Rep.*)

160. Eulenburg.—Subcutaneous Injections of Various Salts of Silver. (*Trans. German Med. Congress*, 1882.)

161. Carter.—Cascara as a Laxative.

Art. 129. *Patella on Resorcin.*—Vicenzio Patella says (*Gazz. Med. Ital. Prov. Venete*, Oct. 14, 1882) that chemically pure resorcin, which alone ought to be used medicinally, occurs in white shining needles, which do not alter after long exposure to the air. It has an aromatic (benzoin) odour, bitter taste, and is very soluble. Its solution is neutral, becoming brown, more or less deep, according to its concentration, when left in open vessels. Pure resorcin with perchloride of iron gives a beautiful deep violet colour; its solution with sulphate of soda is coloured intense ruby red when treated with perchloride of iron. It may be prescribed in all cases where an antiseptic is useful. In articular rheumatism and typhoid fever it reduces the temperature, but not so much so as other remedies. In remittent and intermittent fevers it is especially useful. According to Lichtheim it is a specific in malarial fevers, and reduces even chronic splenic tumour. In infantile diarrhœa it has given splendid results in doses of 10 to 30 centigrammes in 60 grammes of water. Its most important uses are, however, external, as a substitute for carbolic acid (Dujardin-Beaumetz). It is much less poisonous, it has no disagreeable smell, and no causticity. It is very useful in affections of the eye. The dose is from 2 to 6 grammes in solution; it may be given by the rectum, which readily absorbs it in the same doses. It is eliminated by the kidneys; therefore, when these are diseased, it must be given with more care.

130. *De Renzi and Rummo on Inhalations of Iodoform and Turpentine.*—The patients (*Gazz. Med. Ital.*

Prov. Venete, Oct. 7, 1882) were made to inhale twice a day for two hours, in a small room, the spray of iodoform and turpentine. The effects were more satisfactory than with any other mode of treatment. There was always prompt and considerable diminution of cough and expectoration; in bronchiectasis the fœtid expectoration was completely deodorised. Physical signs diminish, the temperature falls, pulse and respiration are less frequent. The secretion of urea is lessened in proportion to the fall of temperature. Iodoform given by inhalation is much more prompt in action than when taken by the stomach; it is an anæsthetic to the pulmonary vagus, and has an alterative and drying local action, which is aided by the turpentine. Its antiseptic action must also be taken into account.

131. *Bareggi on a Special Indication for the Administration of Salicylate of Soda in Typhoid Fever.* Bareggi (*Gazz. degli Ospitali*, Dec. 3, 1882), having noticed in all cases of acute articular rheumatism treated by him with salicylate of soda, that obstinate constipation occurred after two or three days' treatment, determined to utilise this action of the salicylate, in typhoid fever with profuse diarrhœa. He found it to answer admirably; the diarrhœa ceased after two or three days, and the disease ran a favourable course. The salicylate may be given in larger doses than in rheumatism, without any bad effects on the digestive or the nervous system.

132. *Giné, Armenqué, and Aranjo on Bicarbonate of Soda in Acute and Chronic Tonsillitis.*—Drs. Giné, Armenqué, and Aranjo (*União Medica*, Rio de Janeiro, 1882) have experienced in numerous cases the surprising efficacy of bicarbonate of soda, applied either as powder by insufflation, or in concentrated solution with a brush, in acute tonsillitis, and in hypertrophy of the tonsils consecutive to repeated angina. The effect is prompt; in twelve hours the greatest improvement is obtained, in whatever period of the complaint the treatment is commenced.

G. D'Arcy Adams, M.D.

133. *Wasilieff on the Influence of Calomel on Peptic Fermentation and the Vitality of Lower Organisms.* Dr. O. P. Wasilieff (*Centralbl. für die Med. Wiss.*, Nov. 4, 1882) says that the solution of fibrin and its conversion into peptone by artificial gastric juice is interfered with by the addition of a certain quantity of calomel, whilst the products of decomposition of fibrin, indol, phenol, &c., are also absent in the presence of calomel. In the absence of calomel, the decomposition is attended with the disengagement of sulphuretted hydrogen, whereas with the calomel the disengaged gas is inodorous, and contains a larger proportion of carbonic acid. In like manner, the decomposition of albumen and butyric acid is arrested by calomel. The researches of Pasteur also have shown that calomel hinders the development of lower organisms in nutritive fluids, and destroys the vitality of already developed bacteria. The green colour of the stools after administration of calomel is in like manner attributed by the author to arrest of changes in the bile. In conclusion, Dr. Wasilieff relates the experiment of administering calomel to a dog, and then killing it. The intestines were found to contain leucin and tyrosin, but indol and phenol were absent.

134. *Jarisch on Pyrogallic Acid in some Skin-Diseases.*—Dr. Jarisch (*Centralbl. für die Ges. Therap.*, January 1883) employs in psoriasis an ointment of from 5 to 10 per cent. of pyrogallic acid. The scales being washed off the surface with warm soap and water, the patches of disease are painted over with the ointment by means of a bristle-brush. The patient is clad in a flannel dress, and the ointment is applied at least once, sometimes twice, daily. A bath is used once a week, the ointment being omitted on that day. Slight erythema usually follows the application of the ointment, and when this ceases the ointment may be discontinued, and the surface simply dusted with starch-powder. An inconvenience sometimes attending the use of pyrogallic acid is a brown discoloration of the skin, especially of the palms of the hands. Soap intensifies the brown colour. Pyrogallic acid possesses antiseptic properties, and destroys fungoid growths. The author has seen favus and eczema marginatum rapidly cured by this application. The eczema is prone to return after apparent cure; for this he uses an alcoholic solution of the acid with glycerine.

W. B. Kesteven, M.D.

135. *Gilles de la Tourette on the Hypodermic Use of Iodide of Potassium.*—M. Gilles de la Tourette (*Le Progrès Méd.*, No 1, 1883) draws attention to the hypodermic use of iodide of potassium. He found that it was possible to introduce a syringeful of a solution containing 7·5 grains of iodide of potassium, carefully neutralised, without causing any irritation. In twenty injections, only one caused a slight slough. Some burning pain was complained of, which was usually readily allayed by gentle friction with the palm of the hand. The drug was readily absorbed, and could be detected in the urine on the following day. He thinks the method may be of value where there is intolerance of the drug by the mouth, or in cerebral syphilis with coma and inability to swallow medicines. Robert Saundby, M.D.

136. *James on Dialysed Iron.*—Dr. Prosser James, in the *Med. Times and Gazette*, Dec. 1882, p. 659, gives an article on dialysed iron, its use, administration, and chemical preparation. For practical therapeutical uses, we may say, its production depends on the results obtained by the late Professor Graham in his researches on the diffusion of liquids. The liquid obtained by dialysis differs altogether from an ordinary solution of salts of iron, and the iron is at once precipitated by sulphuric acid, by alkalies, and by many salts. Ordinary spring water will cause a precipitate; but no precipitate is produced by nitric, acetic, or hydrochloric acid; from which it is concluded that it will not be affected by the chlorides of the alimentary canal. For therapeutic use, the persalts of iron should be employed when the astringent properties are indicated, and the protosalts or other milder preparations when no astringency is required. When small doses of the vegetable salts or of reduced iron are not well tolerated, we may rely upon dialysed iron. The average dose is from seven to fifteen drops twice daily. Dialysed iron deserves notice as an antidote to arsenic, being ready when wanted, and acting as rapidly as the old remedy of the moist peroxide. As to purity, if carefully prepared, the solution is quite neutral, has no astringency, and answers to the chemical characteristics stated.

137. *Post on Large Injections of Nitrate of Silver in Chronic Dysentery.*—Dr. Post, in the *Lancet*, Dec. 1882, p. 936, gives the notes of the following cases which came under his care. A lady, age 30, was first attacked with pains in the back of the head and some confusion of the mental faculties,

which, with persistent sleeplessness, continued for about six months, when she was attacked with diarrhœa, which gradually assumed a dysenteric character; after she had suffered many weeks, the injection of nitrate of silver was tried, the strength being forty-five grains of nitrate of silver to three pints of water. Severe tenesmus and much pain with the passage of mucus and blood followed the injection, but was relieved by small quantities of opium, and in a few days a marked improvement had taken place; the number of stools was less, the pain less severe, and the patient was able to sleep for three or four hours at a time, an occasional injection of ten minims of laudanum being alone given. On the fifth day a second injection of nitrate of silver was used, which caused great pain, which laudanum injections again relieved. On the fifteenth day there had been no return of diarrhœa; the patient had been up during three afternoons, walking about the room, and feeling stronger each day.

138. *Browne on the Therapeutic Effects of Hyoscyamine.*—Dr. Thomas Browne, in the *Brit. Med. Jour.*, Nov. 1882, p. 1030, gives an account of the use, dose, and best mode of administration of hyoscyamine. He says that if given by the mouth its action is uncertain, as a small dose will have more effect on an empty stomach than a larger one may when the stomach contains food. The hypodermic method is the best, in doses beginning at one-thirtieth of a grain. Dr. Browne describes three cases in which marked benefit was gained by the occasional use of this drug in furious mania, and one case of a patient suffering from general paralysis of the insane, who was in a condition of unceasing motor activity, in whom marked effects were produced by a dose of one-thirtieth to one-fifteenth of a grain, given every day, or every other day, for about a fortnight.

139. *Simpson on the Action of Hyoscyamine.*—Dr. Simpson, in the *Brit. Med. Jour.*, Dec. 1882, p. 1148, gives the notes of two cases in which he gave hyoscyamine hypodermically in doses of one-twentieth and one-fifteenth of a grain, and produced very serious symptoms, needing the use of strong stimulants to restore the patient. Dr. Simpson has discarded the use of this drug as being too dangerous. It never does more than quiet a patient, and does not tend to stop the frequency of the attacks, having to be given periodically with every fresh outburst of violence.

140. *Roden on the Brine-Springs of Droitwich.*—Dr. S. S. Roden, in the *Brit. Med. Jour.*, Nov. 1882, p. 990, draws attention to the potency of the brine-springs of Droitwich, showing that they contain nearly ten times the amount of saline or solid matter found in sea-water. The class of ailments that derive most benefit from the use of these baths are undoubtedly those of either a rheumatic or a gouty origin; and attention is drawn to the surprising rapidity with which large dropsical swellings of joints, and thecal and bursal distensions, will disappear from the use of the hot brine-bath. Dr. Roden excludes 'hæmorrhages' from the list of diseases which derive benefit from their use, but adds that in one form of hæmorrhage, *i.e.* chronic menorrhagia, surprising benefit has arisen, although the baths were used against his advice.

141. *Elliott on Chamomile Tea in Infantile Diarrhœa.*—In the *Practitioner*, Dec. 1882, p. 426, Dr. Christopher Elliott speaks strongly in favour of the use of chamomile tea in infantile diarrhœa. The dose, for infants under one year, is ʒss. to ʒj., and double that quantity for older children, given two or three times a day, or oftener. The rationale of the action is the power the drug possesses of subduing reflex excitability. This power belongs especially to the volatile oil contained in the flowers. A decapitated frog, previously fortified by a dose of oil, was not susceptible to the influence of strychnia, according to Grisan; who also calmed tetanic convulsions, due to strychnia, by chamomile oil.

142. *Cauty on the Internal Use of Chrysophanic Acid in Psoriasis.*—Mr. Cauty, in the *Lancet*, Dec. 1882, p. 935, refers to a paper which appeared in that journal in May 1882, and draws attention to the fact that no notice had been taken of the state of the pulse in the cases cited in the paper. In psoriasis the pulse is slower, smaller, or weaker than it ought to be, and any medicine which either ameliorates or cures this disease improves the pulse in rapidity, volume, or strength. Mr. Cauty gives notes of three cases, in which he tried chrysophanic acid with little or no benefit, and in which severe purging and vomiting was produced, and is of opinion that the benefit arrived at in the cases published in the *Lancet* was due to the constant purging produced by the drug, so that there is nothing specific in the action of the acid when taken internally.

143. *Myers on the Treatment of Rheumatism by Blisters.*—Mr. A. B. R. Myers (in the *Brit. Med. Jour.*, Nov. 1882, p. 985) protests against the use of the 'garter' blister in rheumatism, on the ground that it does not cut short the attack, yet causes the patient considerable discomfort; whilst he advocates wrapping the joints in cotton-wool and binding them firmly with flannel bandages. With regard to internal remedies, Mr. Myers' experience teaches him that patients improve as quickly when taking no medicines as those to whom opium is given freely. He does not seem to place much value in salicin.

144. *Ralfe on Sodium-Nitrite in Epilepsy.*—Dr. Ralfe, in a paper read before the Royal Medical and Chirurgical Society (*Brit. Med. Jour.*, Dec. 1882, p. 1095), gives the notes on seventeen cases of epilepsy treated by sodium-nitrite, which resembles in its action nitrite of amyl and nitro-glycerine; but its effects are produced more slowly and are more permanent in character. The dose should just fall short of producing full physiological effect. Purity of the drug is essential. Of the seventeen cases three received no benefit, four improved slightly, one was a doubtful case, whilst nine benefited decidedly. The author draws the following conclusions from these results. 1. Sodium-nitrite is not suitable for those cases in which bromide of potassium is of marked service. 2. Those cases in which bromide of potassium does not agree well from the first will probably be found to improve under sodium-nitrite. 3. To patients who have taken bromide some time and in whom the drug is apparently losing its effect, or who are suffering from bromism, sodium-nitrite is useful as a change medicine. 4. There is a class of cases consisting chiefly of minor seizures or convulsive attacks, such as often occur in young persons usually at night, in which sodium-nitrite is especially beneficial. [*Vide* London Medical Record, 1882, p. 315.]

145. *Spender on the Local Application of Tannin in Erysipelas.*—Dr. Spender, in the *Brit. Med. Jour.*, Dec. 1882, p. 1147, highly recommends the

use of a solution of tannin, in equal parts of spirits of wine and water, as a local application in cases of so-called idiopathic erysipelas. The proper strength of the solution is six grains to the fluid drachm. Dr. Spender draws attention to the want felt by the medical profession of a monograph on erysipelas in its medical and surgical aspects.

146. *Fowlwort: a New Vegetable Styptic.*—In the *Lancet*. Oct. 1882. p. 716, attention is drawn to a new vegetable styptic (Tradescantia erecta—Fowlwort) brought over by the French expedition to Mexico. A specimen planted by the discoverer in Versailles, in 1867, flowered and fruited and lost none of its styptic properties. It might be easily cultivated, and is cheaper than perchloride of iron.

147. *Hudson on Eucalyptus Rostrata as a Remedy for Diarrhœa.*—Mr. Hudson, in the *Lancet*, Dec. 1882, p. 1029, writes reminding the profession of the success which this drug has afforded in the treatment of diarrhœa. In acute cases half an ounce of the strong decoction should be given every two hours, or oftener at first, until some effect is apparent, the frequency of the dose to be diminished gradually as the diarrhœa lessens. It adheres firmly to mucous surfaces, diminishing their secretion, and coagulating the albumen; it also contracts the vessels of the gut, and gives the latter tone.

148. *Death during Administration of Dichloride of Ethidene.*—In the *Brit. Med. Jour.*, Dec. 1882, p. 1267, an account is given of a patient having been admitted into the Liverpool Eye and Ear Infirmary, suffering from a wound of the right eye. On examination, a piece of metal was detected buried in the lens. The patient was put under dichloride of ethidene; in about ten minutes he became anæsthetised and the corneal section was made; almost immediately the pulse became very feeble, and every effort made to restore the patient was fruitless. At the *post mortem* examination no valvular disease of the heart was detected, but there was marked fatty degeneration of its muscular tissue. There were marked signs also of fatty degeneration of the larger vessels, and in the thoracic aorta in one place there was an appearance as of a healed atheromatous ulcer, a condition not expected in the patient, as he was only 26 years of age.

149. *Collier on Croton-Chloral as a Soporific.*—Dr. Collier, in the *Brit. Med. Jour.*, Dec. 1882, p. 1238, draws attention to the good effects of croton-chloral in producing refreshing sleep. It acts often in cases of insomnia in a wonderful manner after every other drug has been tried; it ought to be given in 5-grain doses every half hour until sleep is produced. Liebreich considers the drug preferable to chloral-hydrate, since it does not interfere with the circulation or respiration. [A reference to the *Med. Digest*, Sect. 443:3, gives Dr. Riddell the credit of suggesting the use of croton-chloral in cases of insomnia combined with weak heart, in the *Brit. Med. Jour.*, May 1879, p. 667.—*Rep.*]

150. *Couldrey on Salicylate of Soda in Scarlatina.* Dr. James Couldrey, in the *Lancet*, Dec. 1882, p. 1064, writes to say what great benefit seven cases of scarlatina have received by the prompt administration of salicylate of soda; the dose given was fifteen grains every two hours until the singing in the ears was produced, and then every four hours until the end of the first week. For children the dose was one grain of the salicylate for every year of age of the patient. [A reference to Section 81:6 of the *Med. Digest*, will show that the value of salicylic acid and salicylate of soda have long been advocated by more than one observer.—*Rep.*]

151. *Harries on Boracic Acid in Diphtheria.*—Mr. Harries, in the *Lancet*, Dec. 1882, p. 1004, refers Dr. Goodhart to a communication in the *Lancet* of Feb. 15, 1882, in which Mr. Harries advocates the use of boracic acid in diphtheria as a specific in the early stages of the disease, and gives some statistics showing the results of ten years' experience. Dr. Goodhart speaks of the 'loosening,' dissolving and preventing the reformation of the membrane by this treatment, but Mr. Harries does not agree with him in saying that the membrane is dissolved by the boracic acid. [Dr. Atkinson in 1880 strongly advocated the use of boracic acid both internally and locally in cases of diphtheria. *Vide Med. Digest*, Section 822:5; London Medical Record, 1880, p. 231.—*Rep.*]

152. *Wortabet on Oil of Turpentine in Egyptian Endemic Hæmaturia.*—Dr. Wortabet, in the *Lancet*, Dec. 1882, p. 979, gives an account of a case in which he cured a patient aged 20, of hæmaturia. The urine when first examined contained blood, and also ova and free embryos of the Bilharzia in large quantities. At first the patient was treated with large doses of quinine without any change in the symptoms. Then oil of turpentine was given in doses of one drachm three times a day; this was continued daily for about three weeks, during which time it was observed that the ova became broken, and no living embryos were seen, until, at the end of the three weeks, all symptoms had disappeared and the urine was healthy. This is the only instance recorded of any drug having perfectly cured this kind of hæmaturia, so common in Egypt.

153. *Read on Gelsemium Sempervirens in Tetanus.*—Dr. John Read, of Alabama, in the *Brit. Med. Jour.*, Dec. 1882, p. 1245, reports a case of tetanus cured by gelsemium sempervirens. The case was that of a strong mulatto woman, who was suffering from well-marked tetanic convulsions, caused by a broken bit of glass in her foot. Chloroform was given, but the glass was not extracted as it was almost impossible to keep the patient quiet. As the tetanus did not seem to be influenced by morphia, Dr. Read ordered twenty minims of fluid extract of gelsemium every two hours, alternating with the same quantity of liquor potassæ at the same intervals. On the second day the dose was increased to forty minims every two hours, and on the third day there was a marked improvement in the tonic and clonic spasms. After the fourth day the rigidity of the jaws was almost entirely relieved, and the dose reduced to twenty minims every two hours, convalescence being rapid. No other symptom besides controlling the spasms was produced by the gelsemium.

154. *Wilson on the Curative Effect of Chloral in Albuminuria.*—Mr. T. Wilson, in the *Brit. Med. Jour.*, Dec. 1882, p. 1247, gives two cases in which he has treated albuminuria with chloral. One was that of a woman, age 40, who was suffering from a dilated heart, passive congestion of the kidneys, and severe dropsy. It was noticed that after taking a dose of chloral one evening, the urine was lighter in colour and contained less albumen. After this frequent doses were given and gradually the œdema disappeared. The chloral was then withdrawn and the symptoms returned, but were removed by again administering chloral. Mr.

Award of Merit—International Medical Exhibition, London, 1881.

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A Concentrated Extract of Malted Wheat, Oats, & Barley.

The Original and only Preparation composed of these three Cereals.

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The word **MALTINE** is our Registered Trade Mark, and applies **solely** to our preparations.

In its preparation the temperature employed does not exceed 150 deg. Fahr., thereby retaining all the nutritive and digestive agents unimpaired. The German process, under which Extracts of Malt are made from Barley alone, directs that the mash be heated to 212 deg. Fahr., thereby coagulating the Albuminoids and almost wholly destroying the starch digestive principle, Diastase.

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MALTINE with Beef and Iron
MALTINE with Cod-Liver Oil
MALTINE with Cod-Liver Oil and Pancreatine
MALTINE with Cod-liver Oil and Iodides.
MALTINE with Cod-liver Oil and Phosphorus
MALTINE with Cod-Liver Oil and Phosphates
MALTINE with Iodides
MALTINE with Hypophosphites
MALTINE with Phosphorus Comp.
MALTINE with Peptones
MALTINE with Pepsine and Pancreatine
MALTINE with Phosphates
MALTINE with Phosphates, Iron, and Quinia
MALTINE with Phos., Iron, Quinia, & Strychnia
MALTINE Ferrated
MALTINE WINE
MALTINE WINE with Pepsin and Pancreatine
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MALTO-VIBURNIN

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Why does Maltine (malted wheat, oats, and barley) contain much larger proportions of Constructive and Nutritive properties than the best Extracts prepared from Barley alone?

Because Chemical Analysis has shown that Wheat and Oats contain much larger proportions of Albuminoids and Nitrogenous elements than Barley. Gluten, which is found very abundantly in Wheat, is the most nutritious element obtained from the Cereals, and the only vegetable substance that will support life indefinitely. Wheat contains from 15 to 35 per cent. of Gluten. Its proportion in other grains is insignificant. (*See Flint's Physiology of Man, p.* 52.) The Nitrogenous principles of Wheat and Oats, *when malted*, are more soluble than they are in Barley, and it is for this reason that dairymen will pay fivepence to sevenpence per bushel for the refuse of grains from malted Barley, whereas they will not accept the refuse grains from Malted Wheat and Oats as a gift.

'Wheat and Oats stand first among our list of Cereals in combining all the elements in proportions necessary to support animal life. They are especially rich in muscular and fat-producing elements. 'Baron VON LIEBIG.'

Why does Maltine contain much larger proportions of the digestive principle, Diastase, than the ordinary Extracts prepared from Barley alone?

Because the Gluten and Ceraline in the Malted Wheat have sufficient power to convert all the starch of the three Cereals into sugar, leaving the unemployed Diastase of the Wheat, Oats, and Barley in the Maltine. Gluten and Cerealine act as powerful ferments, transforming starch, first into dextrine, and then into sugar. (*See Flint's Physiology of Man, p.* 53, *and Watts' Dictionary of Chemistry, vol. i., p.* 657 ; *vol. ii., pp.* 625 *and* 823.)

Drs. William Roberts and J. Milner-Fothergill recommend Maltine to be mixed with the food, or taken during the meal, to get the best effects of the digestive principle, Diastase.—*Practitioner*, January 1881.

We shall be pleased to furnish Samples of our preparations to any Medical Practitioner desiring them.

Maltine will keep perfectly in any climate or season of the year.

MALTINE and COMPOUNDS in Bottles containing 8 and 16 fluid ounces, equal in weight to 12 and 24 ounces, and in Winchester Quarts, 120 ounces in weight.

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'CARNRICK'S'

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A Concentrated Powdered Extract of Beef, Partially Digested and Combined with an Equal Portion of Gluten.

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'CARNRICK'S' BEEF PEPTONOIDS contain *only the nutritive portions* of the beef. It contains *no water* and *no inert matter* of any kind. We combine the dry Extract of Beef with an equal *portion* of Gluten to prevent a tendency to deliquescence, and in order to present the preparation in a powdered and portable form. It is well known that Gluten is the most nutritious substance found in the Vegetable Kingdom, and in nutritive elements is closely allied to Beef.

Four ounces of 'CARNRICK'S' BEEF PEPTONOIDS represent as much nutritive and stimulating properties as forty-eight ounces of the best lean Beef.

Four ounces of 'CARNRICK'S' BEEF PEPTONOIDS contain more nutritive elements than ten pounds of any Extract made by Liebig's formula, and from four to six times more Albuminoids and Fibrinoids than any Beef Extract ever offered to the Medical Profession.

Our machinery and process for the production of BEEF PEPTONOIDS are perfectly adapted to the *elimination* of all inert portions of the Beef, and the *retention* of all the nutritive constituents.

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The favour our preparation of BEEF PEPTONOIDS received at the hands of Drs. AGNEW, BLISS, HAMILTON, REYBURN, WOODWARD, BARNES, &c., the corps of eminent Physicians, who employed the preparation with so much advantage in the treatment of the late PRESIDENT GARFIELD, proves conclusively its great value, not only as food to be taken by the mouth, but also how important an agent it has been found in feeding by the Rectum.

Please refer to the very able article of Dr. D. W. BLISS, in New York *Medical Record*, July 15, 1882, in which he so frequently refers to our BEEF PEPTONOIDS having been used to so great an advantage, not only in the case of the late PRESIDENT GARFIELD, but many others as well.

A reliable and experienced person is employed to select the Beeves before they are slaughtered, and to superintend the killing and dressing. Great care is exercised in this respect, and none except the most healthy and suitable Beeves are employed in making our BEEF PEPTONOIDS.

Every physician will appreciate the importance of this care, for an Extract made from diseased Beef would not only be deleterious, but would, in many cases, produce lasting injury and fatal results.

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Convalescence from all diseases, Fevers, Pneumonia, Weak Digestion, Diarrhœa, Dysentery, Phthisis, Cholera Infantum, Marasmus, Sea Sickness, Excessive use of Alcoholic Stimulants. Per Rectum in all cases where the stomach cannot digest the food, and in debility resulting from any cause. Also a valuable adjunct in voyages and camp life.

We shall be pleased to have the Profession everywhere test the value of this Preparation, and for that purpose we shall be happy to send a sample to any regular practitioner desiring it; also circulars fully explanatory.

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Wilson tried the drug again in a patient aged 68, suffering from albuminuria, with the same results. RICHARD NEALE, M.D.

155. *Saveljeff on the Therapeutic Use of Clay.*—Dr. M. V. Saveljeff, of Vladimir, confirms (*Vratch*, 1882, No. 16) the results published by Drs. D. T. Sokoloff (*London Med. Record*, April 1882, p. 144) and A. Masalitinoff (*Ibid.*, Nov., p. 452). Having followed the advice of Professor Botkin, he has since 1878 employed clay-cakes in about 100 cases of cardiac organic diseases, cardiac neuroses, and palpitations, of every kind, and invariably met with most remarkable success. He takes common red clay (instead of Sokoloff's sculptor's clay, or Masalitinoff's plaster of Paris), moistens it with water until a thick paste is formed, makes a cake of a palm's size and of a finger's thickness, and then applies it to the cardiac region. Pain disappears within eight to ten minutes, palpitation within ten to fifteen. A cake dries in feverish patients in two to three hours, otherwise in five, and then is to be changed. Clay-cakes are beneficial not only in cardiac cases. The author himself has suffered from paroxysmal neuralgia in the region of the left kidney, the attacks being very severe, and lasting from six to eight hours, in spite of the use of narcotics. Of late, he began to apply clay-cakes to the painful region every time when a paroxysm was coming. Since then, the paroxysms have had a duration of only half an hour or so, and appear far more rarely. In conclusion the author states that the Vladimir peasants from time immemorial have employed red clay-cakes (all over the body) as a cooling remedy in febrile cases of every description.

156. *Schnaubert on Milk-Diet in Graves' Disease.* Dr. Schnaubert, in Botkin's *Ejenedeln. Klin. Gaz.*, 1882, No. 13, speaks very favourably of the value of exclusive milk-diet in cases of exophthalmic goitre. In one of his patients, three weeks' treatment by milk restored digestion and general health, and so greatly improved all symptoms, that some weeks later the patient left the hospital relatively sound and remained so nearly two years. At this time, she returned with highly developed signs of the disease, and though the milk treatment again greatly relieved the patient's condition, she soon died. The necropsy showed hyperplasia in the cervical sympathetic ganglia, pigmentation of roots of the cervical nerves, and cerebro-spinal hyperæmia. [The milk-treatment proved as beneficial in two cases of Graves' disease, reported lately by Dr. Catharina Shumova in Botkin's *Ejenedeln. Klin. Gaz.*, 1882, Nos. 1–5.—*Rep.*]

157. *Kaczynski on Petroleum in Small-pox.*—Dr. Kaczynski (*Przeglad Lekarski*, 1882, No. 13) painted the skin of variolous patients with a mixture of petroleum and olive-oil (1 : 3 or 4) and obtained good results even in the confluent variety. The crusts rapidly fell off, leaving the skin smooth and pale.
V. IDELSON, M.D.

158. *Banatvala on the Use of the Syzygium Jambolanum in Diabetes.*—Mr. H. E. Banatvala, in the *Midland Medical Miscellany*, draws attention to the therapeutic value of the fruit-stones of the Syzygium Jambolanum, belonging to the natural order *Myrtaceæ*. Shortly before he left India, he was watching some chronic cases of diabetes where the daily excretion of urine and sugar was considerable. They had all yielded in the beginning of the illness to opium, codeia, ergot, or the sulphide of calcium; but the recovery was in each case only temporary. Dietetic treatment alone had any hold upon the disease. One patient passed on an average about ten pints of urine daily, of specific gravity 1032, containing nearly one-half sugar. His appetite was failing, and he complained of great thirst and dryness of the mouth and throat. The skin was dry, and the bowels as a rule constipated, excepting when any irregularity of diet occurred (which was often the case). This showed itself the next day by a more copious passage of urine, and a smart attack of diarrhœa soon afterwards. Some Hakeem (a quack) had prescribed for him five-grain doses of the above-mentioned fruit-stones dried and powdered, to be taken three times a day; and he noticed that he passed less urine, and that his rest was unbroken. On examination of the urine, Mr. Banatvala found the specific gravity 1020, and no sugar: the quantity had come down to the normal, and some of the urgent symptoms had disappeared. The patient did not restrict himself in his diet. Mr. Banatvala therefore tried the drug in three other cases with the following results. 1. It had a decided influence upon the daily secretion of urine by lessening its quantity. 2. The quantity of sugar disappeared in every case while the patients were taking the drug. 3. The preliminary change was produced on an average in about forty-eight hours. The prominent symptoms have disappeared, and the patients have secured an immunity from the usual consequences of a starchy diet in such cases so long as they are under the influence of the drug. With regard to the properties of the tree, the leaves, stem, and fruit are all astringent. The fruit is of a bluish-black colour externally, pulpy within, of a sweetish astringent taste, and is eaten largely by the natives. The fruit-stones used belonged to a variety that grows on the hills in Western India, which is characterised by bearing fruit much smaller than the ordinary Jamboo sold in Bombay.

159. *Duval on Turpeth Mineral in Croup.*—Dr. Fordyce Barker, of New York, places great reliance on this drug in croup. Dr. E. R. Duval stated at a meeting of the Medical Society of the State of Arkansas (*Transactions*, and *Philad. Med. and Surg. Reporter*) that for twelve years, after the manner of Dr. Barker, he had been using the turpeth mineral in the treatment of this disease, and he had since the adoption of this plan lost no case. His treatment has been, immediately upon being called to a case, to administer at once a dose of the agent (from 2 to 5 grains, according to age) in honey, syrup, or sugar of milk, and if there be no decided emesis within fifteen minutes, to repeat the dose; and he has never known it to fail to vomit at the second dose; almost immediately a satisfactory response is secured by the first administration. The vomiting is usually free, without effort and without depression. The powder is tasteless, small in bulk, prompt in action, and thorough in effect. The action is said to be sedative and revulsive. It depletes the mucous membrane by an abundant secretion of mucus, which is thrown up; it removes from the larynx, by the forced expiration which it causes, any albuminous or fibrous exudation which may become subsequently pseudo-membrane; it acts as a powerful revulsive, and thus diminishes the capillary circulation in the trachea and larynx; and thus it becomes a most effective agent in arresting the inflammatory forces. If the croup persist after removing the causes of reflex action, then, of

course, other therapeutic agents will need to be essayed; but throughout the attack, be it short or long, when the breathing becomes suffocative, from the accumulation of mucus in trachea or larynx, he gives the turpeth mineral in the manner and according to the conditions and plans above designated.

160. *Eulenburg on Subcutaneous Injection of Various Salts of Silver.*—Dr. Eulenburg presented a paper at the German Medical Congress, held in Wiesbaden (*Transactions*, 1882), in which he related some experiments undertaken by him to determine the utility of the hypodermic injection of silver. The uncertain results following the administration of nitrate of silver by the mouth, he thought, were due partly to a reduction of the salt in the process of compounding, and partly to chemical changes which it undergoes in the stomach. The first experiments were made with chloride of silver. Immediately after the injection no discomfort is experienced, but later some inconsiderable pain is felt for several hours. This is probably due to the deposition of metallic silver in the tissues. Some injections of the phosphate were made in rabbits without exciting any local irritation. As this salt is soluble only in a strongly acidulated menstruum, trials were made of the pyrophosphate, which requires much less acid for its solution. No irritation followed the injections. Finally, an albuminate was used with the same negative result. Previous trials of the nitrate had demonstrated that no evil effects followed its injection other than some pain, and, very rarely, slight inflammation. The author stated that a part of the injected salt is precipitated at the point of insertion, and a part passes in a soluble form into the blood and is excreted by the kidneys. From the experiments thus far made, Eulenburg concluded that solutions of the silver salts in suitable form might be administered subcutaneously with advantage, and that the results obtained are much more certain than when the metal is given by the mouth. As regards the particular salt most suitable for hypodermic use, the author was as yet undecided.

161. *Carter on Cascara as a Laxative.*—Dr. Carter, of Liverpool, in an article on new therapeutic agents, writes to the following effect concerning cascara (*rhamnus purshiana*). The fluid extract prepared from the bark of this shrub, or small tree, is an excellent remedy in chronic constipation. I have used it now for two years, and have no doubt of its value. The fluid extract is reddish brown in colour, and extremely bitter. A very good method of prescribing it is in a mixture, with twice its quantity of glycerine, or one of the flavoured syrups. Of this a fluid drachm should be given three times a day, and the dose be diminished as soon as its aperient action is developed. It is what may be termed a tonic aperient, and seems to produce an effect somewhat like that caused by belladonna and nux vomica united with an ordinary aperient. It evacuates the whole canal. The motion is not watery, but usually semi-solid, truly feculent in character, and voided without difficulty, and, so far from its causing subsequent constipation, the bowels will often act regularly after its use has been entirely discontinued. I have used it so extensively, and the testimony to its value is so unmistakable, that it would be difficult to select particular cases to prove this.

MEDICINE.

RECENT PAPERS.

162. De Renzi.—Electricity and Intermittent Fevers. (*Annali Univ. di Med.*)

163. Massei.—Laryngeal Aphthæ. (*Assoc. Med. Ital.*)

164. Borgherini.—Contributions to the Cure of Echinococcus Cysts by Capillary Puncture. (*Gazz. Med. Ital. Prov. Venete*, Aug. 12, 1882.)

165. Bianchi.—Observations on Gastric Irrigation. (*Lo Sperimentale*, June 1882.)

166. Tansini.—Capillary Puncture of the Stomach for the Injection of Liquids. (*Gazz. degli Ospitali*, Aug. 16, 1882.)

167. Dozzi.—Intestinal Obstruction Cured by Capillary Entero-puncture. (*Gazz. Med. Ital. Prov. Venete*, Sept. 23, 1882.)

168. Hamilton.—On Myxœdema. (*New York Med. Record*, Dec. 9, 1882.)

169. The Diagnosis of Floating Kidney, (*Revue Méd.*, No. 1, 1882.)

170. Kerschensteiner.—Epidemic Pneumonia. (*Allg. Med. Central-Zeit.*, June 17, 1882.)

171. Eloy.—Orchitis in Enteric Fever. (*L'Union Méd.*, Nov. 18, 1882.)

172. Broadbent.—Abnormal Rhythm of the Heart-Sounds. (*Practitioner*, Jan. 1883.)

173. Charcot.—Hysteria in Boys. (*Le Progrès Méd.*, No. 51, 1882.)

174. Taylor.—Body-Temperature in Different Situations. *New York Med. Record*, Nov. 18, 1882.)

175. Guérin. The Prodromal Stage of Typhoid Fever. (*Bull. de l'Acad. de Méd.*, Jan. 9.)

176. Pollock.—Ulcerative Endocarditis with Pyæmic Symptoms. (*Ibid.*, Dec. 1882, p. 976.)

177. Wingrave.—Sudden Death after Diphtheria. (*Ibid.*, Oct. 1882, p. 724.)

178. Millican.—The Microscope in Diarrhœa. (*Ibid.*, Oct. 1882, p. 657.)

179. Johnston.—Phthisis; its Etiology and Treatment. (*Ibid.*, Dec. 1882, p. 1003.)

180. Atkinson.—Nourishment in Delirium Tremens. (*Practitioner*, Jan. 1883, p. 38.)

181. Atkinson.—The Causation of High Temperature in Typhoid Fever, and its Reduction. (*Brit. Med. Jour.*, Dec. 1882, p. 1205.)

182. Granville.—Diphtheria and Typhoid Fever. (*Lancet*, Dec. 1882, p. 1055).

183. Brown.—Primary Endocarditis. (*Brit. Med. Jour.*, Dec. 1882, p. 1206.)

184. Paterson.—Frequent Tapping in Ascites. (*Lancet*, Dec. 1882, p. 1065.)

185. Southey.—Acute Rheumatism complicated with Pericarditis and Pleuro-pneumonia. (*Ibid.*, Dec. 1882, p. 983.)

186. Hamilton and Others.—Orchitis in Typhoid Fever. (*Ibid.*, Dec. 1882, pp. 994, 1039, 1065.)

187. Wilson.—The Temperature and Pulse in Intermittent Fever. (*Lancet*, Oct. 1882, p. 642.)

188. Squire and others.—The Incubation Period of Scarlet Fever. (*Brit. Med. Jour.*, Nov. 1882, p. 996, and Dec. 1882, p. 1091.)

189. Main. The Period of Infectiveness in Scarlet Fever. (*Ibid.* Dec. 1882.)

190. Tchirkoff, V.—On Displacements of the Heart and Syncope in Cases of Pleuritic Effusion. (*Moscow Inaug. Dissertation*, 1882, p. 66.)

191. Chomiakoff, M. A., and Kotovshtchikoff, N. T.—A Contribution to the Study of Origin of Respiratory Murmurs. (*Dnevnik Kazan. Obst. Vrachei*, Nos. 13 and 14, 1881.)

192. Velijanin.—On the Diagnosis of Aneurisms of the Ascending Aorta. (*Ejenedeln. Klin. Gaz.*, 1881, No. 31.)

193. Simanovsky.—On a Case of Congenital Heart-Disease. (*Ibid.*, 1881, No. 23.)

194. Adam.—Drainage in Anasarca. (*Australian Med. Gaz.*, Aug. 1882.)

195. Rosenbach.—The Diagnosis of Spurious Heart-Murmurs. (*Trans. of German Med. Congress*, 1882.)

196. Rühle.—The Uræmic Seizure. (*Trans. of German Med. Congress*, 1882.)

197. Simoneau.—Fatal Tetanus complicating Typhoid Fever. (*Four. de Méd. et de Chir.*, August 1882.)

198. Leroux.—Hereditary and Congenital Malaria. (*Rev. de Méd.*, No. 7, 1882.)

Art. 162. *De Renzi on Electricity and Intermittent Fevers.*—The treatment of intermittent fever by electricity in the Medical Clinic of Genoa, directed by Professor de Renzi, has given very good results (*Annali Univ. di Med.*) Electricity was first tried in the treatment of intermittents by Frank and Borsieri, afterwards by Aldini, Cavallo, and Puccinotti, and lately, after having been neglected for a long time, by Bossi of Rome, Sini of Leghorn, and by Shipulski, Deparquet, &c. In De Renzi's hands it gave immediate and decisive results. He says that in the majority of cases intermittent fever can be cut short more promptly than by quinine. In nine cases he had five complete cures, one marked improvement, one slight, and two unsuccessful cases. He uses the constant and the faradic currents; the constant applied for five to fifteen minutes in ascending direction along the spinal column, the rheophores being placed over the two extremities of the medulla; the faradic of medium intensity for half an hour, the patient holding a rheophore in each hand. The faradic was more efficacious than the constant current. The new studies of De Renzi have confirmed the possibility of overcoming intermittent fever by this method, but do not solve the following questions. Why is a rapid and complete cure sometimes obtained, while sometimes it is incomplete? What is the best method of applying electricity? When ought it to be preferred to the preparations of cinchona?

163. *Massei on Laryngeal Aphthæ.*—Professor Massei gives (*Congresso Gen. dell' Assoc. Med. Ital.*) the history of two cases of laryngeal aphthæ (*muguet*). The first was a lady who had had measles, jaundice, and urticaria; her convalescence was prolonged and retarded by a laryngeal *muguet*. With the laryngoscope was seen a stratified exudation in the larynx, similar to the exudation of croup. It was cured by inhalations of the spray of lime-water and borax. The second case was that of a boy, who presented the symptoms of stenosis of the larynx. He was cyanotic, with cold extremities. When the tongue was depressed, the epiglottis was distinctly seen to be involved in a white exudation. The laryngeal catheter was introduced, and in the matter withdrawn on the catheter were found under the microscope spores of *oïdium albicans*. Laryngeal aphthæ are secondary to aphthæ of the pharynx and mouth. The symptoms depend on the seat and quantity of the exudation; if it be abundant and in the cavity of the larynx, there are signs of stenosis of the larynx; if, instead, it be situated on the periphery of the organ, there is dysphagia. The laryngeal catheter may be used for diagnosis. It must not be used in croup, as it may detach false membranes and give rise to fatal stenosis. In chronic stenosis it may be used safely.

164. *Borgherini on the Radical Cure of Echinococcus-Cysts by Capillary Puncture.*—Dr. Borgherini reports (*Gaz. Med. Ital. Prov. Venete*, Aug. 12, 1882) five cases treated by puncture with the needle of the hypodermic syringe and the extraction of 2 to 3 grammes of fluid. Three were cured; the fourth left the hospital with the cyst rapidly disappearing; the fifth required two punctures, the second time with complete extraction of the contained fluid. In all the cases the puncture did no harm, but was always followed by slight fever. In the first case the fever was prolonged for ten days, threatening suppuration. The first indication of improvement in the condition of the cyst is seen after eight, ten, or twelve days.

165. *Bianchi on Gastric Irrigation.*—This operation is becoming every day more recognised as useful in suitable cases. Bianchi relates four cases (*Lo Sperimentale*, June 1882). 1. Chronic gastritis, simulating cancer, pains in the right side, great emaciation, vomiting of food and blood, followed by relief. Many remedies were tried with no good effect until irrigation of the stomach with water at 12° or 14° C. (53·5° or 58° F.), was resorted to. The patient felt better the same day. The irrigation was repeated every morning, at first with plain water, afterwards with water containing 8 grammes of bicarbonate of soda to the litre. The patient was discharged cured in a month, having gained 5 kilogrammes in weight. 2. Chronic catarrh (drunkard's), with probable pyloric stenosis of inflammatory origin. There were pyrosis and vomiting of food, preceded by pain in the epigastrium; cure, in a month. 3. Gastric catarrh, with marked dilatation of the stomach. Great improvement followed in three days, when the patient left. 4. Carcinoma of stomach, fixed pain in the pyloric region, vomiting of blood, even more than three litres in twenty-four hours. The patient experienced much relief from the irrigations, and was able to take liquid nourishment and gained strength for a time, but died after a month, worn out by the cachexia and debility.

166. *Tansini on Capillary Puncture of the Stomach for the Injection of Liquids.*—Dr. Iginio Tansini, of Lodi (*Gazz. degli Ospitali*, Aug. 16) proposes this operation as likely to be often of great service, especially where passing the œsophageal tube is impossible or unadvisable, and where antidotes have to be promptly introduced into the stomach. Gastrotomy is always a serious operation, while puncture by a capillary trocar he has proved by experiments on animals to be harmless. From his studies on the dead body he believes that it is practicable, even with the stomach empty and retracted. Labbé says that the anterior surface of the empty stomach is directly accessible in a triangular space, whose base is below and corresponds to the great curvature (or to the transverse line which joins the cartilages of the ninth ribs), and whose margins are—to the right, the left lobe of the liver; and to the left, the margin of the false ribs. Tansini introduces the trocar about 6½ centimètres from the xiphoid apophysis on the left, near the costal margin, the trocar being directed slightly towards the diaphragm. For greater security, when the stomach is pushed against the diaphragm, he introduced the trocar in the eighth left intercostal space, close to the sternum. He owns that the introduction of a trocar through the abdominal and intercostal parietes into an empty stomach is uncertain: the risk is run of either not penetrating the stomach at all, or of penetrating too deeply. He therefore recommends an incision to be made 3 centimètres along the left costal margin, the centre of the incision to be about 6½ centimètres from the xiphoid apophysis. Thus the anterior sur-

face of the stomach may be exposed and seen to be uncovered by the left lobe of the liver and colon, and if this last be in the way it may be pushed down, and the trocar then introduced.

167. *Dozzi on Intestinal Obstruction cured by Capillary Entero-puncture.*—Dr. Giulio Dozzi (*Gazz. Med. Ital. Prov. Veneto*, Sept. 23, 1882) relates the case of an old woman aged seventy who, after eating a large quantity of water-melon and swallowing the seeds, suffered from obstruction of the bowels. Purgatives and injections had been tried with no relief. The meteorism was enormous. He determined to try entero-puncture, using trocar No. 2 of Dieulafoy's aspirator. Four punctures were made, two in the right iliac region, the third in the left upper fourth, and the fourth in the left lower fourth. From three punctures issued an immense quantity of gas; from the fourth no gas, the trocar being plugged with fæcal matter. A dose of oil given the same evening procured four copious evacuations, and the patient made a good recovery. One of the punctures gave rise to a small abscess. In this case peristaltic action was evidently prevented by the enormous quantity of gas, arising from the decomposition of the retained fæces.

G. D'Arcy Adams, M.D.

168. *Hamilton on Myxœdema.*—Dr. Allan McLane Hamilton (*New York Med. Record*, Dec. 9, 1882) writes an excellent paper on myxœdema, based upon a case recently reported by Dr. Holland of Louisville. He found nitro-glycerine do good in the treatment. He thinks renal disease to be the result, not the cause, and thinks it probably due to a primary lesion of the medulla oblongata, 'with secondary extension to the postero-lateral columns of the spinal cord and the spinal sympathetic ganglia.' He appends the following bibliography, which may be usefully reproduced:—Rösch, *Untersuchungen über den Kretinismus in Würtemburg*, Erlangen, 1844, pp. 179, 183; Curling, *Med.-Chir. Trans.*, Vol. xxxiii. p. 303; Fagge, *Med.-Chir. Trans.*, Vol. liv., p. 159; Gull, *Trans. of Clin. Soc.*, Vol. vii.. 1873; Ord, *Med.-Chir. Trans.*, Vol. lxi., and *Brit. Med. Jour.*, May 1878; Olier, *Arch. Gén. de Méd.*, June 1879; Savage, *Jour. of Mental Science*, January 1880; Thaon, *Revue Mens. de Méd. et de Chir.*, August 1880; Goodhart, *Med. Times and Gazette*, May 1, 1880; Hadden, *Le Progrès Méd.*, 1880, Nos. 30 and 31; Inglis, *Lancet*, Sept. 25, 1880, p. 605; Ballet, *Le Progrès Méd.*, 1880, No 30; Bourneville and Olier, *Le Progrès Méd.*, 1880, No. 35; Lloyd, *Brit. Med. Jour.*, Jan. 22, 1881; Hopkins, *Lancet*, Dec. 10, 1881; Mahomed, *Lancet*, Dec. 24, 1881; Charcot, *Gaz. des Hôpitaux*, No. 10, 1881; Hammond, *Neurological Contributions*, 1881; Mercer, *New York Med. Record*, April 16, 1881; Ridel-Saillard, *Thèse*, No. 218, 1881; Cavafy, *Brit. Med. Jour.*, Dec. 24, 1881; Morvan, *Gaz. Hebd. de Méd.*, Aug. 26, and Sept. 6, 9, and 16, 1881; Fiesinger, *Revue Méd. de l'Est*, 1881, p. 301; Lunn, *Brit. Med. Jour.*, Dec. 24, 1881; Heron, *Med. Times and Gazette*, Jan. 1882; Henrot, Proceedings of French Society for Advancement of Science, Trans. in *New York Med. Record*, Oct. 14, 1882; Charpentier, *Le Progrès Méd.*, Feb. 4, 1882; Seppilli, *Rivista Speriment. di Freniat. e di Med. Leg.*, 1 and 2, 1882; Semon, *Trans. Clin. Soc.*, 1881; Blaise, *Archiv. de Neurolog.*, 1882, Nos. 7 and 8; Hadden, *Brain*, July 1812; Holland, *American Practitioner*, Sept. 1882; Cushier, *New York Med. Record*, Aug. 19, 1882, and *Archives of Medicine*, Dec. 1882.

169. *The Diagnosis of Floating Kidney.*—An anonymous writer (*Revue Méd.* No. 1, 1883) points out that displacements of the kidney were studied first by Mesné and Riolan, and have been discussed by Rayer, Fritz, Lancereaux, and Lecorché, while they have formed the subjects of clinical lectures by Trousseau and N. Guéneau de Mussy. These cases have almost always occurred in women in middle life, after a fall, a walk, or without apparent cause. The physical signs are those of a globular tumour, of the size of a fist, which changes its place and can often be pushed into the position of the kidney, when all the disagreeable subjective symptoms cease. When it is compressed, the patient feels a peculiar nauseating sensation. The lumbar region may show a concavity, and be less dull on percussion. The tumour swells at each monthly period, and causes much pain. He gives details of two cases, in which no opportunity occurred of confirming the diagnosis. In another a young phthisical lady, after a violent shaking, was taken with great pain in the abdomen, radiating down the legs. To the right of the umbilicus there was a hard, nodular, movable, painful tumour, which was thought to be a floating kidney, the urine having greatly diminished since the accident. At the necropsy, the right kidney was found in its place, and in front of it an irregular, yellowish tumour, of the size of an orange, consisting of the gall-bladder full of calculi. The gall-ducts were six or seven inches long, which explained and permitted the displacement.

170. *Kerschensteiner on Epidemic Pneumonia.*—Kerschensteiner (*Allg. Med. Central-Zeit.*, June 17, 1882) relates an epidemic which broke out in the House of Detention at Amberg in the winter of 1879-80, attacking 14 per cent. of the prisoners, with forty-six deaths. The patients discharged at the time did not carry any infection with them, so that the poison was apparently not transportable. He also reports another epidemic at Urter, which began amongst people who had worked for some hours in a room containing cages of foreign birds, which had come from Berlin, Hamburg, and Vienna, where typhoid was then very prevalent. The disease was decidedly infectious; the incubation appeared to be from nine to fourteen days. The symptoms of onset were those of typhoid fever. Pneumonia appeared about the end of the first week; the spleen became enlarged, with roseola and sometimes petechiæ. In four cases there was angina, in one case commencing with false membranes; in four cases epistaxis; in four cardiac dilatation; in four albuminuria; the kidneys showed slight alteration of their cortices. The mortality was great—three out of seven.

171. *Eloy on Orchitis in Enteric Fever.*—M. Eloy (*L'Union Méd.*, Nov. 18, 1882) draws attention to the orchitis which occasionally supervenes in the course of enteric fever. Numerous observations have been recorded by Bouchut, Duffey, Hanot, Sabourin, Huchard, Vidal, Chedevergne, Cervelle, Vallin, Ellis, &c.; and in 1878 a discussion upon it took place at the Société Clinique. Its appearance is often sudden, attended by a rise of temperature. It may occur during the fever, or in the course of convalescence. The pain is not so great usually as in urethritis. One testicle only is affected; the epididymis is almost always unaffected. In seven out of nine cases the attack was in the right testicle. In eight out of twelve cases the attack was benign, terminating in eight or ten days by resolution; it

may be fugitive. In four out of thirteen cases there was suppuration. Persistent induration of the epididymis and even atrophy of the organ sometimes resulted.

172. *Broadbent on Abnormal Rhythm of the Heart-Sounds.*—Dr. Broadbent (*Practitioner*, Jan. 1883) draws attention to the variations in the length of the interval between the first and second sounds of the heart, and their significance. He thinks the interval is increased when the arterial resistance is great and the compensatory hypertrophy failing, the sound then becoming equidistant like the *tic-tac* of a watch. It is also heard in fatty heart and great pericardial effusion. On the other hand, the interval is shortened from diminished peripheral resistance, or when the ventricle fails to complete its contraction, and in this condition the danger of fatal syncope is extreme.

173. *Charcot on Hysteria in Boys.*—Charcot (*Le Progrès Méd.*, No. 51, 1882) thinks hysteria relatively common in boys about the age of twelve or thirteen. Such cases present more or less of the characteristic phenomena met with in women—hemi-analgesia, hysterogenic points, amblyopia, and epileptiform attacks with marked opisthotonos. In such cases the prognosis is usually good, and the attacks are usually less obstinate than in girls. In the treatment, isolation from the influence of too solicitous parents is essential. He relates the case of a Jewish lad, who only recovered after isolation was obtained. In addition, he recommends the douche every other day, and tonics.

174. *Taylor on Body-Temperature in Different Situations.*—Dr. Henry L. Taylor (*New York Med. Record*, Nov. 18, 1882) has found that the difference between the axillary and rectal or vaginal temperature in typhoid fever, while usually about a degree higher in the latter situation, may vary as much as 2° F. sometimes in favour of the axilla, sometimes of the rectum or vagina.

Robert Saundby, M.D.

175. *Guérin on the Prodromal Stage of Typhoid Fever.*—At the meeting of the Académie de Médicine on January 9 (*Bull. de l'Acad. de Méd.*), M. Jules Guérin contributed to the discussion on the recent epidemic of typhoid in Paris a note on the abortive forms and the prodromal stage of the fever. M. Guérin is satisfied that a true prodromal stage exists, and that its symptoms may be readily distinguished from those of the invasion period. The action of the fever-poison may be compared to the action of such a poison *e.g.* as arsenic. When a dose of arsenic is taken it produces first, by virtue of its presence in the stomach, a certain local action, but presently, if it be not expelled or neutralised, it becomes absorbed and gives rise to a general action. So the poison of typhoid fever, when it enters the body, produces a primary local action, and then, becoming absorbed, gives rise to the characteristic train of general symptoms. The poison may be introduced primarily into the lungs through the respiratory passages, into the nervous system by absorption through the skin, or directly into the intestinal tract; and before it becomes absorbed into the general system it produces in these organs a certain local action, giving rise to symptoms which are truly prodromal. The prodromal symptoms thus indicate the local action of the fever-poison before it becomes absorbed. During this stage therefore, if the poison be evacuated or neutralised, absorption will be prevented and the fever cut short. Acting on this theory, M. Guérin has been able to treat typhoid fever so successfully that during the many years he has put it in practice he has not had a single fatal case. 'I employ,' he says, 'evacuants on the first suspicion of the disease, purgatives for the abdominal form, and emetics, especially ipecacuanha, for the thoracic form,' and immediately thereafter evacuants and disinfectants (preferably carbon) alternately. By using these measures, he declares he has been generally able to prevent the absorption of the poison and the development of the fever. [M. Guérin's theory is very pretty and very logical; but when he claims success in preventing the development of the fever, we cannot avoid questioning the accuracy of his diagnosis.—*Rep.*]

D. Manson Fraser, M.D.

176. *Pollock on Ulcerative Endocarditis with Pyæmic Symptoms.*—Dr. Julius Pollock, in the *Lancet*, Dec. 1882, p. 976, in referring to the attention lately drawn by Dr. Coupland, Dr. Wilks, and others, to a rare and interesting form of ulcerative endocarditis with pyæmic symptoms, gives the notes of a case in which the symptoms of pyæmia came on during the course of a first attack of rheumatic fever, the heart being quite sound; and not in a case where there was previously old cardiac mischief. The patient, a woman, aged 22, was admitted into Charing Cross Hospital with marked symptoms of rheumatic fever, but no abnormal heart sounds were detected. About four weeks from onset of attack patient was suddenly seized with a rigor, and the temperature rose rapidly from 98° to 102·4° F. In a few days, a distinct murmur was heard with the first sound at the apex; this gradually became very distinct, and the patient died about seven weeks from the beginning of the attack, having had repeated rigors, and at the latter part of the time symptoms of consolidation of the lungs. At the *post mortem* examination the left pleura was found full of fluid, and the left lung consolidated with signs of recent infarctions. The right lung was the seat of four or five indurated patches, the result of pyæmia pneumonia. On the right border of the mitral valve there was recent ulceration going on, and around it some exuberant vegetations, soft and easily detached. No atheroma or other valvular mischief was present. Dr. Pollock remarks on the rarity of ulcerative endocarditis with pyæmic symptoms, and thinks that the treatment is very unsatisfactory. He suggests, in cases of pyæmic abscesses in the lungs, the trial of inhalation of carbolic acid.

177. *Wingrave on Sudden Death after Diphtheria.* Mr. Wingrave, in the *Lancet*, Oct. 1882, p. 724, suggests that there may be other causes of sudden death after diphtheria than the action of the diphtheritic virus upon the nerve-centres. At the Middlesex Hospital, attention has lately been drawn to certain changes in the muscular tissue of the heart in a case of diphtheria. When examined microscopically, the muscle-fibres were seen to be undergoing fatty changes; the neighbourhood of the blood-vessels, interstitial connective tissue, and spaces were infiltrated with abundant proliferation of nucleated and granular cells. Scattered here and there were also seen a few granular yellow bodies, but forming no distinct nuclei. This condition was seen in several large areas all over the heart. A second case also presented similar appearances.

178. *Millican on the Microscope in Diarrhœa.*—Mr. Millican, in the *Lancet*, Oct. 1882, p. 657, gives an account of an outbreak of diarrhœa, in which the use of the microscope aided in the treatment of the

disease. A number of cases of severe diarrhœa occurred in a district in Warwickshire, and for some time no good resulted from the administration of astringents, until Mr. Millican examined the stools microscopically, when he discovered them to be swarming with bacteria. The treatment was altered, and one grain and a half of carbolic acid was given internally every four hours, with great success; and later on he tried giving five minims of terebene in mucilage, also with great success. The method of examination for bacteria is, by obtaining a lump of the gelatinous evacuation, drying it on a glass slide, then floating the slide for five or ten minutes on a solution of aniline blue; then wash in diluted nitric acid (one in three), and finally in distilled water, and, when dry, mount in Canada balsam.

179. *Johnston on Phthisis: its Etiology and Treatment.*—Dr. William Johnston, in the *Lancet*, Dec. 1882, p. 1003, suggests a form of treatment of phthisis, based on the grounds that tuberculosis is a parasitic disease of the internal organs, and that the parasite is a bacillus distinguished by its microphytic and other features. It is suggested that by the absorption of medicinal agents, such as carbolic acid, salicin, &c., one may be able to destroy this germ, either by acting on the skin by means of carbolic acid in intimate union with the vapour of water at a high temperature, or else by giving salicin internally, which is decomposed into several compound acids during its passage through the body.

180. *Atkinson on Nourishment in Delirium Tremens.*—In the *Practitioner*, Jan. 1883, p. 38, Dr. Atkinson calls attention to the necessity of feeding the patient in attacks of delirium tremens, a point which he thinks is not sufficiently borne in mind, notwithstanding the emphasis placed upon this fact by Sir James Paget and many others since 1869 (*vide Medical Digest*, 428 : 5.). With chloral in sufficient doses to cause sleep, and food pushed in the form of milk and beef-essence, satisfactory results are quickly obtained.

181. *Atkinson on Causation of High Temperature in Typhoid Fever and its Reduction.*—Mr. G. P. Atkinson, in the *Brit. Med. Jour.*, Dec. 1882, p. 1205, draws attention to the fact that in cases of typhoid fever, where the temperature is high and the delirium marked, counter-irritation, in the form of emplastrum lyttæ, applied to the epigastrium, affords great relief to the brain symptoms, and a prompt reduction of the temperature. Mr. Atkinson published some statements in the *Journal* for Oct. 1880 with regard to his experience in applying counter-irritation to the epigastrium.

182. *Granville on Diphtheria and Typhoid Fever.* Dr. Mortimer Granville, in the *Lancet*, Dec. 1882, p. 1055, in referring to the co-existence of diphtheria and typhoid fever, mentions that the late Dr. William Budd, in his investigations on the nature and propagation of diphtheria and its kindred diseases, draws attention to the fact that typhoid fever is generally preceded by an affection of the throat, which, if carefully examined, will be found to be characterised by the presence of minute pellicles of diphtheritic membrane, usually situated on the upper and posterior surfaces of the tonsils and often in the fauces. Dr. Granville also draws attention to some experiments which have been tried with a view of employing one disease as a prophylactic of the other. He believes that in diphtheria there is generally some, though not great, irritation of Peyer's glands; and when this is strongly marked, there ought to be 'spots.' [Much very interesting and valuable information may be gathered relative to the connection of typhoid fever and diphtheria by turning to Section 819 : 3, *Medical Digest.—Rep.*]

183. *Brown on Primary Endocarditis.*—Mr. J. Brown, in the *Brit. Med. Jour.*, Dec. 1882, p. 1206, draws attention to Dr. Harrison's paper on primary endocarditis, and confirms the conclusion that acute endocarditis is more common in children than is usually supposed. In children acute rheumatism, as a rule, never attacks the joints, but generally the heart, often leaving serious valvular disease. Mr. Brown recommends that, when endocarditis is discovered in a child, one should wrap the chest in flannel, and not examine it too often, as by exposing the chest one runs great risk of further mischief.

184. *Paterson on Frequent Tapping in Ascites.* Mr. Paterson, in the *Lancet*, Dec. 1882, p. 1065, mentions a case of cirrhosis of the liver in a woman, aged 42, in which he tapped the abdomen with a small cannula thirty-nine times in eight months, drawing off altogether 110 gallons of fluid. The treatment, however, was only palliative.

185. *Southey on Acute Rheumatism complicated with Pericarditis and Pleuropneumonia.*—Dr. Southey, in the *Lancet*, Dec. 1882, p. 983, reports three cases of acute rheumatism in which there were well-marked signs of pericarditis and pneumonia. Dr. Southey remarks that he has wondered that the association of pericardial effusion with pneumonia of the lower lobe of the left lung, or with pneumonia of the middle symmetrical portions of both lungs, has so often escaped comment; he has never found this rheumatic pneumonia independently of the pericardial effusion. On the successful manner in which rheumatic fever is treated nowadays, Dr. Southey adds that the reason is because we treat symptoms as they arise, and do not give medicines on purely theoretical grounds. In speaking of salicylate of soda, he says that its real use lies in the good effect it exercises upon the stomach, cleaning the tongue rapidly. Salicin in the later stages, or in a relapse, acts most beneficially on the gastro-intestinal functions.

186. *Orchitis in Typhoid Fever.*—In the *Lancet*, Dec. 1882, p. 994, an article appears noting the rarity of this complication in the older text-books. The orchitis comes on suddenly, does not involve the epididymis, and generally appears at the end of the pyrexial stage or some days after. It is seldom severe, and is never of a neuralgic character; the inflammation is always unilateral, and is more common on the left than on the right side. As a rule, the congestion ends in six to ten days; but sometimes it may go on to suppuration and complete destruction of the organ. Dr. Hamilton (at p. 1039) gives the notes of a case in which an attack of acute pain and swelling of the right testicle came on some days after convalescence commenced. In a short note at p. 1065, Mr. Manly gives his personal experience of an attack of orchitis with (?) phlebitis of both external saphenous veins, which came on during convalescence from a mild attack of typhoid fever.

187. *Wilson on Temperature and Pulse in Intermittent Fever.*—Dr. Wilson (*Lancet*, Oct. 1882, p. 642) draws attention to his experience in cases of remittent fever, during the time he served as surgeon to the Royal Naval Hospital at Malta. He remarks that although the temperature often rose to 104° or 105° F., the pulse remained almost normal in uncom-

plicated cases; but if pneumonia, hepatic or cerebral congestion, or other complications set in, then the pulse rose far above the normal, and the prognosis became more unfavourable.

188. *Squire and others on the Incubation Period of Scarlet Fever.*—Dr. William Squire and Dr. Field (*Brit. Med. Jour.*, Nov. 1882, p. 996) draw attention to cases reported from the Fulham Hospital in the Journal, p. 942. Both agree that the cases reported are not instances showing that the incubation period of scarlet fever extends over five days, but rather that, though exposed to infection for many days, the disease was not contracted for several days after the exposure. Mr. Bryden, at p. 1035, gives an account of his experience in about forty cases, and says that in none was the period of incubation over six days (see also p. 1092).

189. *Main on the Period of Infectiveness in Scarlet Fever.*—Dr. John S. Main (*Brit. Med. Jour.*, Dec. 1882, p. 1091) pronounces a patient recovering from scarlet fever to be free from infection—(*a*) when desquamation has ceased, and a full week allowed to expire besides; (*b*) when the throat symptoms have abated, and all lesions of the mucous membrane are healed; (*c*) when the body-clothing and surroundings of the patient have been thoroughly disinfected. Richard Neale, M.D.

190. *Tchirkoff on Displacement of the Heart and Syncope in Exudative Pleuritis.*—Dr. V. Tchirkoff (*Moscow Inaug. Dissertation*, 1882) has undertaken a series of experiments on dogs in order to elucidate two points: 1, the causes and mechanism of cardiac displacements; and 2, the causes of syncope in patients suffering from exudative pleuritis. He has arrived at the following conclusions. 1. In all cases of pleuritic effusion, the first change in the position of the heart consists in a rotatory movement round the long axis from right to left, the apex invariably turning to the right. 2. This rotation depends upon the increased filling of the right side of the organ, in consequence of narrowing of the blood-current in the pulmonary artery. 3. With increase of the exudation and diminution of negative pressure within the corresponding pleura, the difference in pressure between the affected and healthy pleuræ finds its expression in a displacement of the heart towards the healthy side; the displacement to the right (*i.e.* in cases of left-sided effusion) always being greater and developing more rapidly than that to the left. 4. The apex and the base are displaced simultaneously, but the former in a greater degree than the latter. 5. Positive pressure of an exudation acts only on the distended pericardium and mediastinum, but not at all on the heart itself. 6. Therefore, any extensive displacement of the heart, under the influence of sudden or forcible movements of a patient, cannot take place, for the force of pressure is not excited on the heart, but on various other very elastic structures. 7. In cases of very considerable pleuritic effusions, no rotation of the heart (from right to left) is usually observed; the organ may even appear rotated from left to right under the positive pressure produced by the exudation on the right side of the heart. 8. The sudden death of pleuritic patients cannot be caused by displacement of the heart and sudden compression of the inferior vena cava (as Bartels teaches); for neither experimental cardiac displacements, nor a few minutes' compressions of the vein in dogs, could bring about any attack of syncope; besides, as it is already stated above, any extensive displacement of the heart in a pleuritic patient is impossible. 9. As the author's experiments show, a heart which is exhausted from accommodative work in a case of the pleuritic effusion, may be easily and irrecoverably stopped by irritation of one of the vagus nerves; from this experimental fact, he concludes that pleural inflammation spreading over the mediastinum may exhaust the heart through directly acting on the cardiac nerves, and so may produce an attack of syncope. According to the author, syncope may occur even in cases of scanty effusion, or after the operative removal of the fluid and after cessation of the compensating work of the heart. As one of the causes leading to exhaustion of the heart, the author points out an excessive quantity of carbonic oxide present in the blood of pleuritic patients In conclusion, Dr. Tchirkoff recommends, while operating in empyema, to keep in view that an exhausted heart may be easily stopped in a reflex way, *e.g.* in consequence of pain caused to the patient. [See a clinical study, by Dr. Leichtenstern, of sudden death in pleuritic affections, in the London Medical Record, Dec. 1880, p. 488.—*Rep.*]

191. *Chomiakoff and Kotovshtchikoff on the Origin of Respiratory Murmurs.*—Having repeated the experiments of Aufrecht and Halbertsma, and completed a series of the experimental researches of their own, the authors (*Dnevnik Kazan. Obst. Vrachei*, Nos. 13 and 14, 1881) sum up their results as follows. 1. Aufrecht's theory is incorrect; that is, the bronchial respiratory murmur does not in the least depend upon the movements of quiescent air-columns within the lung. 2. The bronchial murmur originates exclusively in the larynx; the friction of air against the walls of large bronchi does not give rise to these sounds. 3. The vesicular respiratory murmurs are of a compound nature. A large part of them have a laryngeal origin; that is, the bronchial murmur originated in the larynx, while passing through the normal tissues of the lungs, changes its characters, and is heard on the lung-surface as a vesicular murmur. The remaining part of the vesicular sounds originates on the periphery of the lung, but the authors are not as yet able to elucidate its mechanism.

192. *Velijanin on Diagnosis of Aneurism of the Ascending Aorta.*—In cases of aneurism of the ascending aorta, Professor Botkin attributes a great diagnostic value to a specific asthma characterised by short duration and high intensity of paroxysms. According to his teaching, the periarterial inflammatory process spreads on the cardiac nervous ganglia situated close to the origin of the aorta, producing a cardiac neurosis which disturbs the pulmonary circulation and the regularity of the gaseous changes. *Post mortem* examination several times confirmed Botkin's diagnosis, which had been based chiefly on the presence of this pathognomonic asthma and a slight dulness along the left parasternal line. To these cases, Dr. P. N. Velijanin (Botkin's *Ejenedeln. Klin. Gaz.*, 1881, No. 31) adds a new confirmatory instance occurring in a patient, aged 59, who seemed to suffer from an insufficiency of the aortic valves, but at the same time presented asthmatic paroxysms which lasted from one to three minutes, coming on in half-an-hour intervals every day between 6 P.M. and 2 A.M., during which the patient's face grew pale, the extremities cold; respiration rose from 22° to 77° or 56°, the pulse to 120°, the abdomen fell in, the eyeballs became bloodshot, the jugular veins swollen, the cardiac dulness increased.

In view of these asthmatic paroxysms (as well as in view of not less significant inconstancy of aortic diastolic murmur which disappeared at the height of every paroxysm, and was replaced by a clear sound) aneurism of the ascending aorta was recognised, and the necropsy, forty days later, fully verified the diagnosis. There were present aneurism of the bulbus aortæ, atheroma of the main vessel and its branches, and hypertrophy of the left ventricle, the aortic valves being normal.

193. *Simanovsky on a Case of Congenital Heart-Disease.*—Dr. N. P. Simanovsky records (Botkin's *Ejenedeln. Klin. Gaz.*, 1881, No. 23) an instance of congenital cardiac disease in a boy, aged 15, who presented the following remarkable symptoms: 1. Two synchronous and rhythmic apex-beats, one between the fifth and sixth left ribs, a little to the right from the left nipple, another between the fifth and sixth right ribs, about one inch to the left from the right mammillary line; 2. An enormous hypertrophy of the right half of the heart; 3. Retardation of the pulse in all arteries; 4. Both sounds at both apices clear and loud; 5. A loud systolic murmur in the pulmonary artery, which was best audible midway between the left sternal edge and mammillary line, and was propagated as far as the acromial end of the clavicle. This murmur seemed to be uninterrupted, but increased with systole; the first pulmonary sound was audible, but very faintly and indistinct, the second accentuated. Since early childhood the boy suffered occasionally (on exertion) from palpitations, dyspnœa, cyanosis, &c. According to the author, this is a case of congenital stenosis of the pulmonary artery. The retardation of the pulse and an uninterrupted pulmonary murmur he ascribes to the patency of Botal's duct. As to the presence of two apex-beats, Professor Botkin attributes this extraordinary phenomenon not to diplocardia, but to a vast amount of hypertrophy of the right ventricle, with formation of a regular additional apex.

V. Idelson, M.D.

194. *Adam on the Drainage of Anasarca.*—It is known that unpleasant results, or rather accompaniments, occasionally occur in the drainage treatment of anasarca, even by Dr. Southey's improved method. Dr. Adam, of Melbourne (*The Australian Med. Gaz.*, August), thinks that there are leading factors causing the irritation of the skin in cases of anasarca, which result frequently either in simple erythema, erysipelas, or abscess. In the first place, in an œdematous limb the skin-elements become compressed and their vitality is lowered by interference with their nutrition. This is well illustrated when an ulcer forms, cicatrisation will not take place until the œdema be reduced—in other words, until nutrition is restored to the skin-elements, when the sore usually heals kindly, only to break out again as the dropsy re-accumulates. The second factor appears to be the presence of an irritating body—the dropsical fluid—which possesses a weak alkaline reaction. Now it seems probable that any fluid possessing a positive reaction (ether acid or alkaline) flowing over a skin that is badly nourished, and whose epithelium is put on the stretch, will be quite a sufficient irritation to cause untoward complications. Taking this view of the case Dr. Adam, after some previous trials, finally has adopted the following method, which he thus describes. 'Moderately sized Turkey sponges were thoroughly soaked in saturated solution of boracic acid, squeezed dry, and applied over the punctures, and kept in position by a turn of bandage lightly applied. These sponges require to be removed in the course of two or three hours, and the accumulated serum squeezed out and again soaked and re-applied. In this manner a couple of pints or even more of serum could be drained in the course of twenty-four hours.' In all the cases Dr. Adam tried this plan there was not the slightest trace of irritation of the skin. Of course there is no method but which will have its disadvantages, and this is no exception to the rule. The attention required, although great, is not insurmountable. For any case in which this method would be admissible would want considerable nursing, and no extra labour would be involved by it. Perhaps the greatest disadvantage is that the punctures require to be repeated nearly every twenty-four hours. But this is not so painful as may be supposed, for the skin, by tension and loss of vitality, is rendered less sensitive. Another disadvantage is that in some exceptional cases only a drop or two of fluid follows the puncturing. The cause of this probably is that the serum contains too much albumen, or it may be, as Prof. Spencer calls it, solid œdema. Dr. Adam's most successful cases as regards draining were those in which the dropsy was due to cardiac insufficiency. Œdema due to Bright's disease as a rule did not drain so easily.

195. *Rosenbach on the Diagnosis of Spurious Heart-Murmurs.*—Dr. Rosenbach (*Trans. of German Med. Congress*, 1882) recommends the following simple procedure to determine the pneumocardial nature of any murmur. Firm pressure is made with the tip of the finger in an intercostal space at the point of maximum intensity of the murmur. In this way, the portion of lung in which the murmur is produced is pushed away from the heart, and the heart itself is also pressed back, and is prevented from transmitting its pulsations to the lung with force sufficient to give rise to a murmur. The spurious extracardiac murmurs are thus greatly weakened or entirely suppressed, while no effect is produced upon the true cardiac murmurs.

196. *Rühle on the Uræmic Seizure.*—Dr. Rühle (*Trans. of German Med. Congress*, 1882) states that in every case of death from uræmic convulsions œdema of the brain is found to exist. But simple œdema of the brain does not cause convulsions, and some toxic agent must be added to the serous exudation to produce this condition. That chemical changes accompany the uræmic attacks, is shown by the fact that the gastric secretions become alkaline and that the breath turns litmus-paper blue. So soon, therefore, as œdema of the brain comes on in the course of these, as yet undefined, blood-changes, it acts as a poison and gives rise to convulsions.

197. *Simoneau on Fatal Tetanus Complicating Typhoid Fever.*—Dr. Simoneau relates the following (*Jour. de Méd. et de Chir.*, August 1882). A man, aged sixty-six, was attacked with typhoid fever of rather severe form, and a little irregular in its symptoms. The fever had begun to abate, and the patient was supposed to be entering upon convalescence, when he was suddenly seized with vomiting and pain in the epigastrium. On palpation, a rigidity of the muscles of the right side of the abdomen was noticed. A few days later the muscles of mastication became affected, and the patient developed all the symptoms of tetanus and died in thirty-six hours. The hygienic surroundings of the patient were of the best, and no cause for the tetanus could be discovered. Dr. Simoneau could find no

similar case reported of tetanus complicating typhoid fever.

198. *Leroux on Hereditary and Congenital Malaria.*—In an article on this subject in the *Revue de Médecine*, No. 7, 1882, Dr. Charles Leroux concludes as follows. 'Owing to a lack of sufficiently numerous and definite observations, it is impossible as yet to affirm the existence of congenital malaria, or to determine the *rôle* played by heredity in the etiology of infantile malaria. The fact, however, of congenital hypertrophy of the spleen, accompanied by certain characteristic lesions of malarial cachexia in the infants of women suffering from intermittent fever, would seem to point to a congenital or hereditary malaria. Some children appear to have at birth an hereditary predisposition to malarial fever, even when not exposed to any causes from without. They are often seized, shortly after birth, with a remittent fever of the same type as that displayed by the mother.' The author leaves unsettled also the question whether the theory of heredity is able to explain the intermittent character of certain infantile affections, and the effect upon them of antiperiodic medication.

OBSTETRICS AND GYNÆCOLOGY

RECENT PAPERS.

199. Tolochinoff, N. F.—On the Treatment of Pruritus Vulvæ. (*Vracheb. Vedom.*, No. 18, 1882, pp. 3175–7.)

200. Rasumovsky, M.—On the Nerves of the Mucous Membrane of the Gravid Uterus in Mammalia. (*St. Petersb. Inaug. Dissertation*, 1881.)

201. Okunkova-Goldinger, Zenaïde.—On a Case of Dysmenorrhœa Membranacea. (*Mediz. Obozr.*, Jan. 1882, pp. 182–3.)

202. Drzevezki.—On Condurango in Cancerous Disease of the Uterine Cervix. (*Vratch*, 1882, No. 16, p. 261.)

203. Brown.—Puerperal Albuminuria. (*Boston Med. and Surg. Jour.*, Dec. 21, Case 2.)

204. Dembo.—Spontaneous Contractions of the Uterus in Mammals. (*Académie des Sciences*, Dec. 26, 1882.)

205. Fifield.—The Production of the Orgasmic Climax, without Sexual Appetite and without Sexual Intercourse. (*Boston Med. and Surg. Jour.*, No. 25, 1882.)

206. Haussmann.—Quinine as an Oxytocic. (*Centralbl. für Gynäkologie*, Dec. 30, 1882.)

207. Ashton.—The Treatment of Placenta Prævia.

208. Homans.—One Hundred Antiseptic Ovariotomies (*Boston Med. and Surg. Jour.*, Nov. 2, 1882.)

209. Truzzi.—On Intra-Uterine Vaccination. (*Gazz. degli Ospitali*, Aug. 13 and 16, 1882.)

210. Currier.—Eucalyptus Globulus in Gynæcological Practice. (*Amer. Jour. of Med. Sciences*, Oct. 1882.)

Art. 199. *Tolochinoff on the Treatment of Pruritus Vulvæ.*—Professor N. F. Tolochinoff describes (*Vracheb. Vedom.*, No. 18, 1882) the treatment he successfully adopts in endlessly varying cases of pruritus of the female external genitals. In all cases he recommends washing of the latter two or three times daily with a weak solution of bicarbonate of soda (half a tablespoonful in a basin of water with a tablespoonful of eau de Cologne). When irritation, redness, and tumefaction are only moderate, powdering with oxide of zinc and starch (1 to 6), or smearing with zinc ointment (℥ij. to ℥j. of spermaceti ointment) are sufficient. When irritation is more considerable, and erosions and exulcerations are present, he applies in addition 2 per cent. carbolic solution, or ½ per cent. solution of nitrate of silver, or lead and opium lotion (℞ Plumbi acetatis ℥j., tincturæ opii ℥iij., aquæ destill. lb. j.). In cases of simple eczema there are indicated Hebra's diachylon ointment, green soap, and other similar remedies. Pubic lice are best killed by the grey mercurial ointment. When pruritus is very severe, but the changes on the external genital parts are only slight, the best results are obtained from ice-dressing, smearing with carbolised oil (1 to 1), hypodermic injections of morphine, and the internal use of bromide of sodium (℥j. daily). In cases of diabetic pruritus, the best means is the administration of alkaline mineral waters and salicylate of soda; the latter being useful, too, in pruritus accompanying chronic cystitis. In itching from gonorrhœal urethritis, the author cauterises the urethral walls with 10 per cent. of silver solution (by means of a silver or platine probe). In cases of pruritus from colpitis, the latter is treated by the introduction every third day, through a speculum, into the vagina of a teaspoonful of silver solution (1 to 30), with subsequent plugging; the tampons (and solution) being left for twenty-four hours. Their removal is followed by an injection of tepid weak solutions of lead or borax. Very useful, too, is the introduction of a powder consisting of crude alum and starch (1 to 5), the powder being retained in the vagina by cotton-wool tampons. In cases of cervicitis and endometritis, itching disappears on dilatation of the cervix and an intrauterine injection of tincture of iodine or solution of nitrate of silver. A good palliative means, in cases of pruritus from uterine and vaginal catarrh, is plugging of the vagina with hygroscopic cotton-wool (changed twice a day), as first recommended by Dr. Gaillard Thomas.

200. *Rasumovsky on the Nerves in the Uterine Mucous Membrane.*—Dr. M. Rasumovsky (*St. Petersb. Inaug. Dissertation*, 1881) has examined a number of wombs, gravid as well as non-gravid, in rabbits, dogs, sheep, guinea-pigs, white rats, cats, and cows in order, first, to demonstrate the presence of the nerves in the uterine mucous membrane, and secondly, to study their relations with the glands, blood-vessels, stroma, and epithelium of this structure. Having killed an animal (mostly by puncturing the heart), he instantaneously opened its abdomen and excised a portion of the mucous membrane alone, or with subjacent tissues. The specimens were kept for fifteen to twenty minutes in chloride of gold solution of $\frac{1}{20}$ to ¼ per cent., then they were thoroughly washed and immersed in faintly acidulated (with acetic acid) water. The author arrived at the following results. 1. The uterine mucous membrane is profusely supplied with nerves. 2. They are amyelinic, and appear as axis-cylinders, either naked or enclosed in the sheaths of Schwann. 3. The mucous membrane of a gravid uterus presents the nerves far more numerous, and the individual nerve-stalks much thicker, than that of a non-gravid womb. 4. The membrane contains—at least in the beginning of pregnancy—a broad-meshed nervous network spreading through all its thickness. 5. In the points of ramification of nerve-fibres in the deeper layers of the mucous membrane, there are scattered isolated nerve-cells. 6. In the superficial layers of the membrane, in the region of the superficial capillary plexus, there is situated a narrow-meshed network composed of the finest nerve-filaments. 7. Some of these filaments terminate in the protoplasm of decidual

cells. 8. Some of the cells, situated in abundance alongside of blood-vessels, appear to have a close connection with the formation of new nerve-fibres. 9. There exist narrow-meshed nerve-plexus encircling the blood-vessels, especially the larger arteries of the mucous membrane. [Dr. Rasumovsky had finished his investigations just before the time when Dr. Patenko's article concerning the same subject (see the LONDON MEDICAL RECORD, Jan. 1881, p. 21) appeared. Two recent papers on the innervation of the uterus may be found in the LONDON MEDICAL RECORD, 1879, p. 272 (by Drs. Basch and Hoffmann), and Oct. 1882, p. 423 (by Dr. Rein).—*Rep.*]

201. *Okunkova-Goldinger on a Case of Dysmenorrhœa Membranacea.*—Dr. Zenaïde Okunkova-Goldinger (*Mediz. Obozr.*, Jan. 1882), at a meeting of the Moscow Medical Society, showed a membrane expelled from the uterus of a patient during a menstrual period. Examination showed that it was the hypertrophied mucous membrane of the whole uterus; its length measured 2½ inches, its breadth at the level of the Fallopian tubes 2·2 inches, and at the level of the cervix 1 inch, and its thickness was 0·4 inch.

202. *Drzewiecki on Condurango in Cancer of the Uterine Cervix.*—The writer (*Vratch*, 1882, No. 16) used in a case an ointment made of two drachms of the aqueous extract of condurango bark to six ounces of vaseline. The ulcerated surface rapidly became cleaner, firmer, and smoother, and ceased to bleed, but the progress of the disease continued unchecked. One pound of the bark gave two ounces of the extract. V. IDELSON, M.D.

203. *Brown on Puerperal Albuminuria.*—Dr. Brown (*Boston Med. and Surg. Jour.*, Dec. 21, 1882) divides these cases into three classes—(1) pregnancies occurring in women already the subjects of chronic nephritis; (2) acute nephritis occurring as the result of pregnancy; and (3) albuminuria without renal disease. In the first class, pregnancy can act only prejudicially, and the risk to life is great; in the second class, convulsions are said to occur in one-fourth, and one third of these die. But after parturition recovery is quick and complete, the disease only exceptionally becoming chronic. The third class is of little importance. The quantity of urine excreted is a guide to prognosis; the more scanty it is the greater is the liability to convulsions. He records a case of convulsions in a young unmarried lady, when examination showed albuminuria and an abdominal tumour. She was shortly afterwards confined at the sixth month, and died in about a year of scarlatina. In that case there was a history of uræmia, and the Bright's disease probably preceded the pregnancy. He also records a case of amaurosis and hæmorrhage, with albuminuria, but no proper convulsions. The case terminated by atrophy of the optic discs. [This was probably the result of the excessive hæmorrhage.—*Rep.*]

ROBERT SAUNDBY, M.D.

204. *Dembo on Spontaneous Contraction of the Uterus in Mammals.*—After having experimented on 123 animals, M. Dembo has arrived at the following conclusions.

1. There are, strictly speaking, no spontaneous contractions of the uterus; but this organ is capable of easily contracting under the influence of different agents. Each contraction so called spontaneous is due to a physical or mechanical cause. 2. The gravid uterus is always more apt to give spontaneous contractions so called than a non-gravid uterus, especially under the influence of thermal excitation. In the cow where one uterine horn alone is gravid, we see under the influence of similar excitations that the pregnant horn contracts more energetically than the non-pregnant horn of the same uterus. 3. The uterus of a very young rabbit occasionally gives spontaneous contractions in a more energetic manner than occurs in the womb of an adult virgin. 4. When the belly is carefully opened, in a well warmed room, so called spontaneous contractions are rarely observed. In order to thoroughly understand the *raison d'être* of these phenomena, M. Dembo has studied the action of the different agents—viz., electricity, heat, mechanical interference, and drugs on the uteruses of different animals at different ages. For instance, when the uterus or its inferior segment is directly excited by one of these agents, the following facts are observed. 1. The chemical action on the uterus is sometimes nothing; with chromic, nitric, and acetic acids applied on the lower segment of the uterus contractions are very rarely provoked, although the excitation of this segment is especially capable of determining uterine movements. 2. Mechanical action—friction, for instance—is one of the most constant excitants of the non-gravid or gravid uterus, whether it is still in its normal relations, or whether it has been previously separated from the animal. 3. Thermal excitants—warmth and cold—have a powerful action on all the above-mentioned animals. The degree of excitability of the uterus by these agents is in direct proportion to the difference between the temperature of the uterus and that of its ambient medium.

During pregnancy the excitability of the uterus by these agents becomes more and more marked. M. Dembo has succeeded in expelling two fœtuses from the uterus of a rabbit during labour by plunging its uterus into a bath of 45° C. (113° F.); whilst, on the other hand, the maximum induction current could not cause sufficient contraction to produce this result. This action of temperature explains why a gravid uterus often offers contractions the moment the abdomen of the animal is opened. The colder the surrounding air the stronger the contractions.

205. *Fifield on Sexual Orgasm, independent of Sexual Intercourse or Appetite.*—Dr. Fifield reports an interesting case, in which he had operated on a woman for pus in the pleura. She had a discharging fistula, and Dr. Fifield made an incision between the ninth and tenth rib, removing a large portion of one of the ribs. The patient did not improve after the operation, and had, what not unfrequently occurs with chronic discharges of pus, an alteration in the kidneys, leading to the presence of albumen in the urine. But what tormented the patient chiefly was a constantly recurring orgasm about the clitoris, half a dozen times a day, wearing her life away, in fact only ceasing with her life. In another case, that of a very religious, morbidly depressed, melancholy person, to whom Dr. Fifield was called in consultation, this same orgasm occurred night after night, causing great torment. No vaginal examination had been made previously to Dr. Fifield's visit, when there was found what was first mistaken for a prolapsed ovary, of the size of a large English walnut, upon the right side, and apparently immovable; a pessary was introduced, which threw the growth forward and held it in position.

206. *Haussmann on the Oxytocic Action of Quinine on Pregnant Women.*—The observations regarding the oxytocic action of quinine are comparatively

numerous. Dr. Haussmann has collected a running account of the literature on this subject. He relates the following interesting case which came under his own observation. Frau X. had suffered from a typical neuralgia during her third pregnancy. She was treated with quinine. During the first days of the treatment, when she was about two months and a half pregnant, she experienced two hours after taking the drug, coincidently with the commencement of the buzzing sensation in the ears, sharp uterine pains, which lasted two hours and resulted in considerable uterine hæmorrhage, which ceased after some period of repose. On the following day the labour pains recurred, but less than on the preceding day. Lastly, on one day, on which one and a half grains of quinine were taken on an empty stomach, they commenced almost immediately and lasted until the evening. On those days, on which no quinine was taken, no pains occurred. The action of the quinine was apparently increased by the neurotic and anæmic condition of the patient.

207. *Ashton on the Treatment of Placenta Prævia.* Mr. Ashton concludes a valuable and interesting paper by the following well-considered and suggestive conclusions. He is of opinion that the long forceps should take the place of version—(1) when operative interference is necessary and the head presents; (2) When the placenta prævia is partial; (3) In those cases in which it completely covers the os uteri at the beginning of labour, and after some progress has been made it only partially does so; (4) When exhaustion is present, either from the previous ill-health of the mother or from loss of blood. He is of opinion that version is indicated—(1) Where the cervical attachment of the placenta is too extensive to allow of the application of the forceps; (2) Where there is malpresentation of the child; (3) Where there is contraction of the pelvis, or any condition present which unusually indicates the operation. Lastly, craniotomy may be called for—(1) When exhaustion is very great; (2) When the case is complicated with those conditions which generally render it necessary. FANCOURT BARNES, M.D.

208. *Homans on One Hundred Antiseptic Ovariotomies.*—Dr. Homans (*Boston Med. and Surg. Jour.*, Nov. 2, 1882) simply gives a table of his hundred cases. It is a very full one; but some remarks as to the exact method of operating, and a little more detail as to some of the fatal cases, would have added much to the value of the paper. There are eighty-seven recoveries and thirteen deaths; and if, as we have reason to believe, this includes the whole of Dr. Homans' ovariotomies, he is to be sincerely congratulated on his success. Few, if any, operators have had so small a mortality in a first hundred, and in America the mortality has up to the present time been much higher.

The causes of death are as follows:—in four, shock a few hours after operation; in one, hæmorrhage; in two, exhaustion; in one, diseased kidneys; in one, facial erysipelas; in one, acute mania on the eighth day (hereditary insanity in family); in one, heart-disease; and in two, no cause assigned. The death from hæmorrhage occurred in Dr. Homans' thirteenth case, from slipping of a catgut ligature; and in all the succeeding cases he tied with carbolised silk, burning off the tumour with Paquelin's cautery, and dropping the pedicle in. The two deaths from exhaustion occurred on the third and fifth days respectively. This is an unusual time for deaths from exhaustion, and suggests that the exhaustion was due to septicæmia. It is a pity that more details are not given as to temperature, pulse, &c., in these two, and also in the cases recorded as dying from diseased kidneys and heart respectively. There are two other deaths, presumably from septicæmia; but the cause of death is not distinctly stated. The deaths from facial erysipelas and acute mania must be regarded as accidental misfortunes for the operator's statistics. The hæmorrhage case is a death from a preventable cause, and the cases of death from shock in a few hours disappear in the second fifty; so that we may fairly hope that, when Dr. Homans publishes his next hundred he will show that the following modest statement, which he makes in a foot note, is falsified. 'This is about as well as I can do unless I refuse the desperate cases.' It is significant that there is only one mention of the drainage-tube, and the patient died. The average weight of the tumours leads to the supposition that Dr. Homans is in favour of early ovariotomy, and in this we cordially agree with him. Dr. Homans uses the spray and the full Listerian method; and the absence of all mention of carbolism and carbolic nephritis is notable after all that has been said lately on this side of the Atlantic. About 50 per cent. of the cases seem to have been practically free from adhesions, and this is rather a large proportion of simple cases. In two the weight removed was unusually great, 110 and 80 to 90 lbs. respectively; the first was one of the accidentally fatal cases, and the second recovered. We hope Dr. Homans will publish a short appendix to his table, giving the details suggested, and his experiences as to the effect of the American climate on the success of ovariotomy. Up to the present time, this has been put forward as a reason why the success is not so good as it is in Great Britain. Dr. Homans' results hardly support the theory. J. KNOWSLEY THORNTON.

209. *Truzzi on Intra-uterine Vaccination.*—Dr. Truzzi (*Gazz. degli Ospitali*, Aug. 13 and 16, 1882), as the result of twenty-one experiments, concludes that vaccination in newly born children is always successful, whatever has been the result of the maternal vaccination. Pregnant women in any period may be vaccinated without danger to mother or child, but this vaccination does not give the child the immunity it gives the mother.

G. D'ARCY ADAMS, M.D.

210. *Currier on Eucalyptus Globulus in Gynæcological Practice.*—Dr. Andrew F. Currier reports in the *Amer. Jour. of the Med. Sciences* for Oct. 1882 five different cases of various natures in which the local application of this drug on vaginal plugs proved of the greatest anæsthetic value. Besides its anæsthetic effects it is, as we know, antiseptic and antiperiodic; and hence it will be of use in that large class of cases where foul-smelling discharges exist, and also as an adjuvant in the treatment of malaria. The absorptive function of the vaginal mucous membrane has been comparatively little employed in constitutional treatment, and this is a field which yet remains to be worked up. A daily application of this substance must have more than a local influence. It will usually be difficult to give treatment so frequently, excepting in hospital practice. Much better results would follow could a continuous effect of this, as well as of some other means of treatment, be obtained; but the expense and the annoyance, and in many cases the dread of pain, prevent. The very fair degree of success ob-

tained in treating the cases described in this paper leads him to believe that in less severe cases we can feel almost positive that we can give great relief; indeed, his experience in private practice confirms that belief. In a quite different class of cases, eucalyptus will also be serviceable. He refers to wounds of the breast after the removal of tumours. With the increasing favour of the open method of treating such wounds, especially when the growth removed has been of a cancerous nature, its stimulant and antiseptic properties will prove very acceptable.

SYPHILOGRAPHY.

RECENT PAPERS.

211. Tomashevsky, S. P.—On the Influence of Excision of the Initial Syphilitic Induration on the Appearance and Course of Subsequent Syphilitic Phenomena. (*Vratch*, 1882, No. 16, pp. 251–3, and No. 17, pp. 270–2.)

212. Afonsky.—On Subcutaneous Injections of Corrosive Sublimate in Syphilis. (*Ibid.*, 1882, No. 14, p. 227.)

213. Shiriaff, P. A.—On Two Cases of Syphilitic Disease of Brain-Arteries. (*Mediz. Obozr.*, March 1882, pp. 440–5.)

214. Bechtereff, V. M.—On Syphilitic Disease of Brain-Tissue. (*Ibid.*, March 1882, pp. 450–2.)

215. Teissier.—Contribution to the History of Syphilitic Disease of the Heart. (*Ann. de Derm. et de Syph.*, No. 6, 1882.)

216. Bumm.—On Excision of the Syphilitic Chancre. (*Viertelj. für Derm. und Syph.*, Heft 2, 1882.)

217. Haslund.—On the Behaviour of the Spleen in Syphilis. (*Hosp. Tidende*, Nos. 2 and 3, 1882; and *Viertelj. für Derm. und Syph.*, Heft 2, 1882.)

218. Engel.—The Diagnosis of Pulmonary Syphilis; its Differential Diagnosis from Pulmonary Tubercular Phthisis, with some Remarks on the Pathology of Lung Syphilis. (*Phil. Med. Times*, Oct. 7, 1882.)

219. Carlier.—On Pulmonary Syphilis. (*Thèse de Paris*, 1882; and *Revue des Sciences Médicales*, Oct, 1882.)

220. Cohadon.—On Albuminuria in Secondary Syphilis. (*Thèse de Paris*, 1882.)

221. Rampoldi.—On Hypodermic Injection of Calomel. (*Ann. Univ. di Med. e Chir.*, Oct. 1882.)

222. Birch-Hirschfeld.—On the Micro-Organisms of Syphilitic New Growths. (*Centralbt. für die Med. Wiss.*, Nos. 33 and 44, 1882.)

223. Lowndes and Bernard.—The First Five Years' Work at the Liverpool Seamen's Dispensary for Venereal Diseases. (*Lancet*, Nov. 11, 1882.)

224. Henderson.—Gummata of the Heart. (*Ibid.*, Nov. 25, 1882.)

225. Leloir.—Indurated Chancre between the Second and Third Toes. (*Ann. de Derm. et de Syph.*, Nos. 9 and 10, 1882.)

226. Atkinson, I. E.—Syphiloderma Papulosum Circinatum. (*Jour. of Cutaneous and Venereal Diseases*, No. 1, 1882.)

227. Sturgis, F. R.—Syphilitic Dactylitis of Acquired Origin. (*Ibid.*, No. 2, 1882.)

228. Remondino.—Total Loss of the Penis from Venereal Ulceration. (*Ibid.*)

229. Henderson, Edward.—Salicylate of Soda in Acute Orchitis complicating Gonorrhœa. (*Lancet*, Dec. 16, 1882.)

230. Drysdale.—The Treatment of Syphilis. (*Ibid.*)

231. Routh.—The difficulty of Diagnosing True Syphilis in Females. (*Ibid.*)

Art. 211. *Tomashevsky on Excision of the Initial Syphilitic Sclerosis.*—In a valuable paper, in the *Vratch*, 1882, Nos. 16 and 17, Dr. S. P. Tomashevsky publishes the results of excision performed by him in fifty patients at Professor V. M. Tarnovsky's Clinic, in St. Petersburg. In forty-four cases (86 per cent.) the indurated sore was excised within two weeks after its appearance; in the remaining six cases, at periods between seventeen and thirty days. In twenty-two cases the lymphatic glands and vessels, at the time of the operation, were healthy; in forty-eight there were present lymphangitis of the dorsum of the penis, or swelling of the inguinal glands, or both. In all fifty patients operated on general syphilis subsequently followed. The author comes to the following general conclusions. 1. The initial syphilitic induration is not a result of a purely local lesion (as Hueter, Auspitz, Folinea, and others think), but the first objective symptom of the general infection of a patient's system. 2. Therefore, excision of the primary syphilitic sclerosis, whenever performed, cannot save a patient from secondary symptoms. 3. When the whole induration is fully removed, the wound, in the majority of cases, heals by the first intention. 4. In a considerable majority of cases operated, there is no reappearance of induration at the spot of excision. 5. Though unable to cut short the general syphilitic process, excision of the whole primary sclerosis can considerably shorten the course of the local lesion. 6. The operation does not exercise any influence on the subsequent evolution of the general process. 7. It does not change the duration of the second incubatory stage. 8. There is no difference between operated and non-operated cases in regard to the general character of the lymphatic symptoms which are developed at this stage, and of all symptoms preceding the appearance of syphilitic rash. 9. There is no difference, also, in regard to the subsequent syphilitic lesions of the integuments, mucous membranes, &c. 10. There is no difference, further, in regard to the influence produced by syphilitic infection on the general state of the health. 11. The duration of treatment of the patients operated on is, on the average, equal to that of the non-operated. 12. Lastly, there is no difference whatever between the two categories of cases in regard to relapses of syphilitic phenomena. [In 1877 Professor Tarnovsky, in his editorial annotations to the Russian translation of Lancereaux's handbook on syphilography, stated that, up to the date, he had performed excision in ten cases, in all before the appearance of any lymphatic changes. In all ten patients secondary symptoms were developed, but in the majority of cases the duration of the second incubatory stage was considerably lengthened beyond the average, and the symptoms were unusually mild. Exactly the same results have been obtained by Professor P. Gratziansky, of St. Petersburg. Some papers concerning the same subject may be found in the London Medical Record, 1880, Nov., p. 446 (Chadzynski's); 1881, Feb., p. 78 (Zeissl's); June, p. 241 (Mauriac's); 1882, June, p. 242 (Rasori's).—*Rep.*]

212. *Afonsky on Subcutaneous Injections of Corrosive Sublimate in Syphilis.*—Dr. Afonsky, of Smolensk (*Vratch*, 1882, No. 14) treated fifty successive cases of syphilis, in all stages after the disappearance of primary chancre, by subcutaneous injections of the following solution:—℞ Sublimati gr. vj.; sodii chloridi ʒss.; aq. destill. ʒjss. A syringeful (⅛ of a grain of mercury) was injected in the dorsal region every other day. The symptoms disappeared

after from five to thirty injections, on an average, after twelve or thirteen. For fifty patients treated after this method, the average stay in hospital was thirty-five days; whilst for fifty-five treated by mercurial inunctions and internal administration, it was seventy-two days. In no case did any local trouble, save some tumefaction, occur; pain about the seat of injection was only slight, though lasting, in some instances, one or two hours. Salivation was observed but once (after fifteen injections, in a patient who just before suffered from scurvy). The author enumerates the following advantages of this method: rapidity of action, cleanliness, the precision of the dose, the reduction of the quantity of mercury required for cure, and cheapness. [With regard to the subject of treatment of syphilis by hypodermic injections of mercury and its preparations, see Fürbringer's paper in the London Medical Record, March 1880, p. 93; Terrillon's, *ibid.*, April 1881, p. 159; Streitz's, *ibid.*, Feb. 1882, p. 46; Martineau's, *ibid.*, Feb. 1882, p. 47, and Dec. 1882, p. 512–3.]

213. *Shiriaff on Two Cases of Syphilitic Disease of the Cerebral Arteries.*—The writer (*Mediz. Obozr.*, March 1882) records two cases of malignant syphilis in male patients, aged 55 and 30, one of whom presented, of cerebral symptoms, only cephalalgia and sleeplessness; the second, in addition, right hemiplegia, exaltation, and, during the last five hours of his life, general convulsions, with loss of consciousness. The necropsy revealed chronic inflammation of the cerebral membranes, and extensive alterations of the basilar and Sylvian arteries, which were closely similar to those described by Heubner as endarteritis luetica. As it is well known, Heubner (in his important work published in 1877) asserts that the syphilitic poison circulating in the blood has an irritant action on the arterial walls, and gives rise to proliferation of epithelioid cells, with subsequent transformation of embryonic elements into fibrillar connective tissue, which leads to obliteration of the lumen of a vessel. Dr. Shiriaff, however, in common with Friedländer, Baumgarten, Cornil, and others, denies the existence of a specific primary endarteritis. Careful microscopic investigations into the changes found in syphilitic placentæ and umbilical vessels (the investigations which he carried out during two years, and the results of which he published in his inaugural dissertation in 1881) led him to the conclusion that Heubner's endarteritis luetica is only one of the varieties of common endarteritis obliterans, with organisation of thrombi. The examination of alterations in the cerebral arteries in the present two cases confirmed the thrombotic nature of the obliterative changes which, the author thinks, started under the influence of a chronic inflammatory process in the meninges.

214. *Bechtereff on Syphilitic Disease of Brain-Tissue.*—Dr. V. M. Bechtereff (*Mediz. Obozr.*, March 1882) furnishes the details of two fatal cases of cerebral gummata, in a woman aged 40, and in a man aged 49, and carefully describes the microscopic appearances of the brain-lesion. Studying the development of syphilitic disease of brain-tissue, the author arrives at the conclusion that the process begins with irritative changes in the wall of the vessels, and extensive emigration of leucocytes. The latter accumulate themselves around the vessels, and are transformed into star-shaped cells, which present an essential ingredient of the syphilitic neoplasm. These star-like elements gradually recede from the centre to the periphery, and form successively concentric rings of fibrillar connective tissue. Simultaneously with the development of the latter, there begin obliteration of the central vessel, and muco-colloid and granular fatty metamorphoses, which lead to the formation of a cavity filled with detritus. The detritus may be absorbed, and then the whole gummatous mass may disappear, leaving a firm cicatrix. In contradiction to Charcot and Gombault, who think that the stellate cells of a gumma are developed from neuroglia, Dr. Bechtereff asserts that the latter simply disappears under the pressure of a growing neoplasm.

V. Idelson, M.D.

215. *Teissier on a Case of Syphilitic Disease of the Heart.*—Professor Teissier, of Lyons, reports (*Ann. de Derm. et de Syph.*, No. 6, 1882) the case of a prostitute, aged 27, who was admitted into the Hôtel Dieu under his care on March 14, 1882. The history was that the patient had been seized on the same day, after dinner, with pain in the stomach and bowels, followed by a feeling of oppression. These symptoms rapidly increased, dyspnœa being particularly distressing. In the evening the face was purple, the expression very anxious, the pulse small and irregular, and difficult to count. The patient died next day. *Post mortem*, the walls of the right ventricle and the septum ventriculorum were almost entirely converted into a hard tough fibrous tissue, which creaked on section. The walls of the left ventricle appeared to be nearly healthy, but the endocardium on both sides was more or less dull white and thickened. There were also numerous small white caseous masses, scattered both in the apparently healthy muscular substance, and in the fibrous tissue which had replaced it. The other organs of the body were healthy, with the exception of the kidneys, in which were found gummy nodules similar to those in the heart. The previous history of the patient was that she had been an excessive smoker and drinker of absinthe, that she had never been ill until 1875, when she contracted gonorrhœa, and was treated at the Antiquaille Hospital. In 1876 she again had vaginitis, and in 1879 she was in hospital with mucous patches of the throat and ulceration of the womb. Since December 1879 she had not shown further signs of syphilis, and had continued in apparently good health up to the time of the fatal attack, except that she was subject to oppression or palpitation on walking quickly or going upstairs.

216. *Bumm on Excision of the Syphilitic Chancre.* In a long paper on this subject (*Viertelj. für Derm. und Syph.*, Heft 2, 1882), based upon the results of excision of the initial lesion of syphilis in the clinic of Professor von Rinecker of Würzburg, Dr. Bumm states that excision has been practised since 1877 in all cases where the primary sore was clearly of a syphilitic nature, and in which the duration, size, and seat of the sore were favourable for its complete removal. The author then tabulates a selection from the cases of the last four years, dividing them into two groups. The first table contains twenty-seven cases, in which either the sore alone or both sore and enlarged inguinal glands were removed. In fifteen of these, in which the primary sore only was excised, there was no glandular enlargement in eleven, although thirty days or longer had elapsed since contagion in six of them. In the remaining four cases in which the time after contagion was sixty-five, fifty-seven, sixty-five, and thirty-five days respectively, enlarged glands were present. Of these fifteen cases three are marked successful, that term

being used only after a minimum period of six months' observation. In none of these three cases was there enlargement of the neighbouring glands, and the length of time between contagion and excision was thirty, eighteen, and thirty-one days respectively. The remainder of the fifteen were either too short a time under notice, or were still under observation. In twelve cases, the enlarged glands were excised as well as the primary sore, and of these two are put down as successful. In these, the interval between contagion and excision was forty-five and forty-two days. In the other cases, the result was negative in five; four were still under observation; and in one the subsequent course was that of a soft sore. It is worthy of note that in only four of the whole twenty-seven cases did induration reappear in the scar of the excision-wound; indeed, in the second table this last point appears to be the only one considered; for in the sixteen cases which it comprises excision was not performed until after the appearance of general symptoms. In three, the primarily enlarged glands were removed also. In only three of these did hardening of the scar take place, the three cases in which both glands and sore were excised being among those in which induration did not recur.

217. *Haslund on the Spleen in Syphilis.*—Dr. Haslund, of Copenhagen, begins a paper on this subject (*Hosp. Tidende*, Nos. 2 and 3, 1882; and *Viertelj. für Derm. und Syph.*, Heft 2, 1882) with some remarks on the difficulty of determining the changes of the spleen in syphilis; firstly, because it is an organ which during life is only imperfectly accessible to physical examination; secondly, because its function is but little known; and, thirdly, because syphilis, when it does cause death, is generally so mixed up with other pathological conditions, that it becomes a matter of difficulty in any given case to decide whether the change is really due to the syphilitic dyscrasia or to some accidental complication. At the bedside a swollen spleen can sometimes be made out, but, in the author's opinion, only in the early stage of syphilis, and in cases where the prodromata are so severe that they resemble the symptoms of typhoid fever. In such cases, Dr. Haslund has twice made out an increased area of splenic dulness, but this speedily disappeared as soon as the febrile symptoms had departed. Thus the author does not accept the views of Jullien, Bäumler, Weil, and Wewer, who think splenic enlargement a rather common occurrence. It is more frequently the case that a spleen tumour in the early stages of syphilis turns out after death to be due to amyloid degeneration. This change, however, is not due to the syphilis itself.

In order to form an independent opinion on syphilitic affections of the spleen, Dr. Haslund examined the *post mortem* records of the Communal Hospital of Copenhagen for a period of fifteen years (1866-80). Among these he found 154 cases of children who died with inherited syphilis. In ninety-six the spleen was healthy. In the remaining fifty-eight cases the spleen was diseased, the change being due to hyperplasia in fifty-five; in fourteen of these the consistence of the tissue was normal, in thirty-one the organ was harder, and in ten softer than natural. Further, one case of infarct was noted, one of fibrinous deposit on the serous surface, and one in which there were thickening of the capsule and adhesions. In none of these three is there mention of alteration in size or consistence. Among the fifty-five cases of hyperplasia, fibrinous deposits on the surface of the spleen were noticed nineteen times, scattered patches of thickening of the capsule four times, and adhesions to neighbouring parts once. Finally, in three cases there were miliary tubercles in the spleen, associated with tuberculosis of other organs. As regards the significance of these changes, the author is of opinion that the simple hyperplasia must be considered to be in direct relation with the general disturbance of nutrition caused by syphilis; but whether it be a cause or a consequence of the cachexia must remain doubtful until the functions of the spleen are better understood. The other changes noted are considered to be not directly due to syphilis. Among the 154 cases there were not one of amyloid degeneration, and in only one were gummata mentioned in the report.

The author also examined the *post mortem* records of forty-four adults who died during the course of syphilis in the same department of the hospital during the same series of years. In three of these there was amyloid degeneration of the spleen. This change, Dr. Haslund thinks, is always dependent on chronic suppuration either in the superficial tissues, in the bones, or in the internal organs. Of the three cases just mentioned, there was old necrosis of the scapula and clavicle in one, ulcerated gummata of the skin in another, and suppurative pyelonephritis with calculi in the pelvis of the kidney and left ureter in the third. Among the forty-four cases there was no instance of gumma. In ten the spleen was healthy; in twenty-seven there was more or less hyperplasia, the organ being softer than natural in eleven, and firmer than natural in sixteen; scattered thickenings of the capsule were noted in two cases, and adhesions to the surrounding parts in four cases.

218. *Engel on the Diagnosis of Pulmonary Syphilis, &c.*—Dr. Hugo Engel relates (*Phil. Med. Times*, Oct. 7, 1882) the case of a man aged 32, in a good position of life, who, when he came under observation (in April 1881) appeared to be in the last stage of tubercular phthisis. He was tall, very slim, with a pale face, feverish spots on the cheeks, sunken but brilliant eyes, flat chest, long bony fingers, and a hollow cough. He had had good health until twenty-four years of age, when he had a venereal sore which soon healed, but was followed by a syphilitic eruption, sore throat, and alopecia. He was well treated and appeared cured after about two years. Two years before he came to Dr. Engel, he began to complain of osteocopic pains, which were worse at night. Afterwards, an ulcer appeared on the left shin, and still remained. Early in 1880 he began to cough, then lost flesh, and suffered from night-sweats. For two months he had been spitting blood and brownish grey masses. There was no family history of tuberculosis. On examination, there was dulness over the left infraclavicular region, and a little lower there were signs of a cavity. At the right apex expiration was prolonged, and dry and moist sounds could be heard there as well as over both sides posteriorly. Dr. Engel found that the patient's nails were not clubbed, and this, together with the peculiar sputa and the sore on the leg, led to a diagnosis of syphilitic disease. Under mercurial inunction, followed by iodide of potassium, the patient recovered.

219. *Carlier on Pulmonary Syphilis.*—M. Carlier (*Thèse de Paris*, 1882; and *Revue de Sciences Médi-*

cases, Oct. 1882) agrees with Fournier that, except in the inherited disease, pulmonary syphilis developes in two forms, sclerosis and gumma, which are generally associated together. He insists with Cornil, Sabourin, Brissaud, and other histologists on the difficulty, sometimes even the impossibility, of distinguishing between gumma and tubercle under the microscope, and considers that there are no clinical characters special to syphilitic disease of the lungs. The presence of syphilitic lesions elsewhere is almost the only sign of value, and recovery under specific treatment the only one which makes the diagnosis certain. Contrary to the opinion expressed by Grandidier, the author shows that the middle lobe is not 'almost exclusively the seat of the disease;' nor does he agree with Schnitzler that laryngeal syphilis is always present when the lung is attacked. A table containing a summary of seventy-six cases is appended to the thesis.

221. *Rampoldi on Subcutaneous Injection of Calomel.*—Dr. Rampoldi, of Pavia, recommends (*Ann. Univ. di Med. e Chir.*, Oct. 1882) the subcutaneous injection of 10 centigrammes of sublimed calomel in neutral glycerine, in preference to corrosive sublimate or cyanide of mercury. In a case of gummy iritis, improvement took place the day after the calomel injection was begun.

222. *Birch-Hirschfeld on the Micro-organisms of Syphilis.*—In a paper published in the *Centralbl. für die Med. Wiss.*, No. 33, 1882, Professor Birch-Hirschfeld describes certain organisms which he had found in syphilitic tissues as small rods or bacilli; but in a later communication, published in No. 44 of the same journal, he states that further observations, made under more favourable circumstances, on condylomata removed during life, as well as on a case of syphilitic gumma of the heart, have led him to modify his former opinions. He is now convinced that what he formerly described as round-ended bacilli are really composed of several micrococci joined together. These micrococci are not round, but oval, and under a one-twelfth inch oil-immersion objective appear as short streaks, not as points. In most cases, both monococci and diplococci are present, but sometimes three or five are joined together, in which case, they are liable to be mistaken for bacilli. As regards the diplococci, the author confirms the observations of Aufrecht, who describes them as preponderating in condylomatous tissue. For showing the organisms in recent specimens, liquor potassæ is much better than acetic acid, for it brings out clearly the strongly refracting properties of the cocci, and does not cause a crystalline precipitate, which in the case of the acid is liable to cause confusion and error. In condylomata the micrococci lie mostly in small groups in the papillæ, and in many of the cells of the Malpighian layer. To demonstrate their presence, it is only necessary to incise a freshly removed condyloma which is not ulcerated with antiseptic precautions, scrape off some of the juice from the cut surface, dry it on a cover-glass, and fix and stain it with fuchsin or gentian-violet. In the gummata of internal organs, the micrococci are very small and numerous; in condylomata they are larger, and not so plentiful. In the scars of gummata, the search for micrococci has mostly been fruitless; in fresh gummy growths, they are most numerous in those parts which present the characters of growing granulation tissue. The organisms are scattered singly in some places, whilst in others they form small groups, the size of which does not exceed that of a granulation or spindle-cell. Micrococci were also clearly seen by the author within the cells themselves. In many preparations, again, both of condylomata and gummata, cells (mostly epithelioid) were found, whose nuclei were filled with fine elements considered by the author to be intranuclear micrococci. These have also been mentioned by Klebs, who takes a similar view of their nature.

224. *Henderson on Gummata of the Heart.*—A man, aged 30, was brought moribund to St. Mary's Hospital and died in a few minutes (*Lancet*, Nov. 25, 1882). He had seemed well until a fortnight previously, when he began to complain of faintness and pain in the præcordial region. On his way to his work he suddenly staggered and fell, and was unconscious till death. *Post mortem*, the heart weighed 13½ ounces. The pericardium over the left ventricle was studded with pale yellowish-white elevations; there were also one or two over the right ventricle. The endocardium of the anterior wall of the left ventricle was studded with similar nodules. In the septum was a mass of fibroid tissue extending into the muscular substance, which was permeated by tissue with gummatous characters. The smaller vessels were narrowed by thickening of the intima. The liver had a depressed fibroid scar in the right lobe. The spleen was congested, firm, and adherent to the parietes. The other organs were healthy.

225. *Leloir on a Case of Indurated Chancre between the Toes.*—M. Leloir relates (*Ann. de Derm. et de Syph.*, Nos. 9 and 10, 1882) the case of a medical student in whom the initial manifestation of syphilis was situated between the second and third toes of the right foot. The patient was suffering from eczematous fissures between the toes, and acknowledged contact of the affected part with the lips of a woman who was afterwards found to be suffering from mucous patches of the mouth.

227. *Sturgis on Syphilitic Dactylitis of Acquired Origin.*—A male patient [age not stated.—*Rep.*] entered the Charity Hospital suffering from an early secondary papular syphilide (*Jour. of Cutaneous and Venereal Diseases*, No. 2, 1882.) He had also swelling of the second joint of the middle and ring fingers of the left hand, which had come on gradually during several weeks, and was not attended by marked pain. The fingers were twice as large as the corresponding ones of the right hand, and the swelling was confined to half an inch from the joint either way. The finger could not be bent. No pain was caused by handling, and there were no symptoms of acute inflammation. Green iodide of mercury was given internally, and mercurial ointment applied locally. In four weeks the swelling disappeared, and motion was completely restored.

228. *Remondino on Total Loss of the Penis from Venereal Ulceration.*—Dr. Remondino, of San Diego, reports the following case (*Jour. of Cutaneous and Venereal Diseases*, No. 2, 1882). A native of Mexico, aged 31, in the middle of Dec. 1881 first noticed five sores on the glans penis and corona, the last coitus having presumably taken place at the end of November. Four of the sores healed in the course of a fortnight, but re-opened twenty days later. The fifth sore gradually ate its way through the glans which finally dropped off, and by the following June the whole organ had been destroyed. Dr. Remondino states that during all this time the man lived in the mountains, using the usual herb and

root remedies peculiar to Mexican rural practice, that he never had a bubo, and that he had only lately exhibited constitutional symptoms. His previous health had been good, and his brothers and sisters were healthy.

229. *Henderson on Salicylate of Soda in Acute Orchitis.*—Dr. Henderson, of Shanghai, reports (*Lancet*, Dec. 16, 1882) three cases of gonorrhœal epididymitis in which the symptoms were rapidly relieved by salicylate of soda. In using it, Dr. Henderson advises that only acute cases, *i.e.* those in which there is distinct rise of temperature, be selected. The dose should be not less than 20 grains, repeated every hour until at least three doses have been taken; afterwards at longer intervals. Arthur Cooper.

232. *Rational Treatment of Gonorrhœa.*—A surgeon, signing himself 'Trocar,' states in the *Lancet*, Sept. 1882, p. 602, that for the rational treatment of gonorrhœa he gives regularly 5 gr. doses of iodide of potassium and full doses of cubebs in powder every three hours. The cubebs in drachm doses, he finds, seldom or never fails to cut off the ailment rapidly; and the iodide of potassium, besides its solvent influence on the essential elements of the powder, has a well-recognised action on the various mucous surfaces, as evidenced by the discharges to be noticed very frequently from the nostrils, eyes, &c., when it is administered for rheumatism; and it is simply invaluable for killing the poison of gonorrhœa. Richard Neale, M.D.

REVIEWS.

Article 233.

Lectures on Medical Nursing. By J. Wallace Anderson, M.D. Glasgow: Maclehose & Sons.

Among the efforts made in all parts of the country for the systematic training of nurses to attend the sick in hospitals and in private households, none have been regarded with so much favour, both by the nurses themselves and by those interested in the movement, as the voluntary help given by medical men attached to hospitals, who have shown their zeal in the cause by delivering from time to time short courses of lectures on those medical and surgical topics which are most likely to fall under the notice of the nurse in the course of her duties. The nurse may be said to be the handmaid of the doctor; and in this capacity it would at first sight appear that he above all others should be best qualified to judge of his own requirements, and how these can be most readily imparted to the understanding of the nurse. On the other hand, it may be a question whether the medical man, whom, we are willing to admit, it most concerns, is really the person best fitted to introduce a nurse into the mysteries of her art. The main business of nursing consists of a variety of miscellaneous occupations, which must be learnt by honest hard work under the eye of an experienced female instructor, who has herself passed through the divine drudgery: and oral instruction from the medical superior cannot be reckoned other than supplementary. For, after all, women are the best judges of women's work and women's capacity, and it is mainly to the matrons, sisters, and head nurses of our hospitals that we must look for that practical instruction which will enable the probationer, after a term of training more or less prolonged, to enter on responsible duty. This interval may be longer, but should never be less, than one year, during which the tyro should acquaint herself with the manifold requirements of the sick, whether in medical or surgical wards; perform night as well as day duty, and at the same time be under the constant supervision of a qualified and intelligent head-nurse. Such is the ordeal which beginners have to pass through in the best hospitals, and it would be well if all hospitals throughout the country made this system of practical training a necessity before they ventured on a more ambitious curriculum. Not that we would disparage other means, especially lectures by medical men, to supplement the daily routine of practical work. As the field from which nurses are obtained becomes larger, as education advances, and ladies of culture and refinement volunteer their services for the work in increasing numbers, class-education must be considered, sooner or later, as an essential element of the training course. Miss Nightingale, in a recent article on nurse-training, in *Quain's Dictionary*, gives an admirable account of the curriculum required of nurses associated with the training-school at St. Thomas's Hospital, from which we gather that instruction is imparted to the probationers by separate lecturers on Chemistry, Hygiene, Medicine, and Surgery, while a well-considered scheme of testing their efficiency and acquirements by regular examination is insisted on by those to whom the management of the school is entrusted. In such an organisation, we can discern the immense gulf which separates the nursing of the past from the present; but it may be questioned whether, amongst the multiplicity of lectures and preparations for examinations, the tyro nurse has sufficient time at her disposal to pursue the ordinary work which would naturally devolve on her. Such a system of tuition may be all very well as the type of what a school for nursing might be made, and no doubt is made, by the managers of the Nightingale Fund; but it is scarcely compatible with the requirements of hospitals in general, where, as a rule, the probationers are trained to supply the local wants, and during their term of training act as assistant nurses, when their time is fully taken up in performing their numerous ward duties, often more laborious than those of the head-nurses. If, however, oral instruction from medical men be given apart from the regular ward training, it is clear that it should not be beyond the capacity of the class who offer themselves for the work, and that it should consist of short courses of demonstrations on such subjects as are most likely to be of value to the nurse, always keeping in view the boundary line which separates, or rather which prevents, the nurse from encroaching on the province of the doctor. In dealing with women fairly educated, and where, as in a hospital connected with a medical school, there is no lack of tutorial help, a distinction can very well be made between medical and surgical nursing, although the duties pertaining to each department so constantly overlap that the distinction is more apparent than real. The elementary principles of physiology, anatomy, and hygiene, which must form the basis of all instruction of nurses, are common to both; while the minor details, comprising a knowledge of such appliances and medicaments as are used in the sick-room, with their methods of application, not to mention the general domestic management of the patients, are also alike. In furtherance of this view several manuals have been published, written chiefly by ladies, who have themselves

passed through the ordeal of training ; while two or three volumes, consisting of short courses of lectures addressed to nurses by medical men, have appeared purporting to deal with the subject in a more scientific light.

Dr. Anderson's book treats of medical nursing only, the surgical branch being delegated, we assume, to one of his colleagues of the Glasgow Infirmary. It consists of a series of ten lectures, some of which are devoted to general subjects, and others to special diseases common to the medical wards of hospitals. It also contains a glossary of medical terms, and an appendix of very useful receipts for the preparation of invalid dietaries ; the whole is written with an evident design not to over-reach the intelligence of nurses of the ordinary class, and is sufficiently comprehensive to include most subjects which in a medical point of view are likely to come within their province. Dr. Anderson starts with an exordium on the necessity of cultivating those habits of observation so frequently inculcated on the clinical student, accompanying his remarks with special directions for the taking of blood-temperature, pulse, and respiration. The directions given are concise and good, but we may doubt the expediency, except under special circumstances, of recommending the nurse to take the temperature by the rectum, since in the vast majority of instances it may be satisfactorily ascertained by placing the bulb of the thermometer in the armpit or in the mouth. We think also that a course of lectures on medical or any other form of nursing is incomplete without explanatory references to the position and functions of the various organs of the body, especially to the blood-circulation, the digestive organs, the kidneys, and the brain and nervous system, although it is but fair to state that some of the latter have been cursorily dealt with. The remarks on diet in special diseases, a subject too apt to be overlooked, are much to the purpose, and so also are the methods recommended for checking the extension of disease of an infectious character. Every manual on nursing contains some references to the treatment of bedsores, a calamity always to be dreaded by the nurse ; and Dr. Anderson does full justice to the subject in its double aspect of prevention and remedial treatment. We are rather surprised, however, to notice the omission of a very useful application for preserving the skin in a threatened bedsore, the 'linimentum albuminis ovi,' which was at one time very popular with the nurses in Scotch hospitals, and also the thick felt plaster much employed in the London hospitals to protect the tender parts from undue pressure. The various appliances of the sick-room are assumed to be of as much importance in medical, as in the treatment of surgical cases, but there is little mention made of them, a fact which is possibly accounted for by the absence of all illustrations from the volume. Among such we might specialise the wringer, an useful appliance formed of a couple of sticks and a piece of stout canvas to protect the hands from being scalded in the preparation of a very hot fomentation, the India-rubber bags now used universally for the application of ice to the surface, the various forms of hot air, vapour, and medicated baths, and a variety of apparatus in great favour at the present time for purposes of inhalation. In his directions as to the administration of drugs, Dr. Anderson very properly refers to the mistakes which are liable to arise by using measures other than those of the Pharmacopœia. A tablespoonful is not always half an ounce, nor is a teaspoonful a drachm ; and drops and minims, though considered by most people as synonymous terms, are totally different things. Every nurse ought to supply herself, or be supplied with, the small graduated tumbler and minim measure, neatly packed in a leather case, and sold, at a small cost, by Maw & Son, of Aldersgate Street. A chapter of the book is devoted to the main features of the more common infectious diseases, always an anxious department of nurses' work, and one in which their services are often invaluable. The measures recommended to prevent the extension of these ailments in a household are clear and concise (why should they be put in small type ?), although, to prevent accidents, we always deem it desirable to limit the employment of disinfectants in the sick-room to one, namely, carbolic acid solution, which, in typhoid fever especially, should always be added to the excreta before these are taken from the bedside. The lectures wind up with the usual homily on the domestic virtues on which every one appears bound to comment when addressing nurses. The possession of the natural gifts of tact, patience, punctuality, love of order, and cleanliness are no doubt highly desirable among men and women in all conditions of life ; and nurses no more than their patients can be supposed to be exempt from the ordinary frailties of humanity.

Dr. Anderson's short course of lectures should prove specially serviceable to the class whom he is in the habit of addressing, and to nurses in general entering on medical work in hospitals, as they give a fair summary of the nature of the duties to which their attention must be practically directed. But if it be thought necessary that nurses should have a literature of their own, it would be infinitely preferable to have the material points connected with surgical and medical nursing condensed in a handy volume or text-book, in which considerable space should be devoted to those casualties and emergencies of daily life which are liable to occur in the experience of every one. Such a book would be likely to prove useful to others besides the professional nurse, and especially to mothers of families, who are for the most part their own nurses. Elementary works on physiology, anatomy, and hygiene abound, which every nurse, if so inclined, can peruse with profit ; but, as we have previously indicated, the main portal to distinction and efficiency must rest with the manner in which she pursues her course of practical training in the hospital wards. At the same time, every endeavour on the part of medical men attached to hospitals to improve the curriculum of the nurse by oral instruction cannot fail to be hailed as an earnest of that better feeling which ought always to exist between those to whom the safe custody and treatment of the sick is more immediately entrusted. J. C. Steele, M.D.

Article 234.

A Descriptive Catalogue of the Anatomical and Pathological Museum of St. Bartholomew's Hospital. Published by order of the Governors. Vol. I. Pathology. London : J. & A. Churchill.

This catalogue has been prepared by Mr. F. S. Eve, who held the appointment of curator of the museum of St. Bartholomew's Hospital, when the treasurer and almoners decided upon its publication. The pathological series includes 3,400 specimens in spirit, or mounted in the dry state, 300 calculi, 186 microscopic specimens, 224 casts and models, and 600 drawings, all described in this one volume ; an

admirably convenient arrangement, especially as it has been managed without any sacrifice of necessary information. The book itself is handsomely, though not strongly bound, and very well printed; the specimens are numbered uninterruptedly from first to last, and not re-numbered from the unit at the commencement of every series. The cross references under the headings of the series are very complete, and the descriptions of the specimens are carefully written, so that the catalogue, an absolute necessity to a visitor at St. Bartholomew's Hospital who would reap the full advantages of study in the museum, will also be of high value to pathologists who live too far from West Smithfield to be able to search the treasures of the museum within a convenient space of time, but who require a book of reference for pathological information.

——— Alban Doran.

Article 235.

Copy of the Report from the Select Committee of the House of Commons on the Contagious Diseases Acts, &c. Harrison & Sons. 1882.

This pamphlet, which is published by the Association for Promoting the Extension of the Contagious Diseases Acts, contains, in addition to a copy of the above-mentioned Report, memorials to the Admiralty from inhabitants of Portsmouth and Devonport in favour of the Acts. The Select Committee was appointed in 1879, and between that time and 1882 held sixty-eight sittings, and examined seventy-one witnesses. The result of this prolonged inquiry, as set forth in the Report, is to prove conclusively that the Acts, even in their present limited sphere of operation, have been eminently successful, both from a hygienic and a moral point of view. This being the case, it is to be regretted that the Committee decided only to recommend the maintenance of the Acts in their present form, on the ground that the public opinion of a part of the community is unprepared for their extension. We strongly recommend a careful study of the pamphlet to all who take an interest in the subject of contagious diseases and their prevention. Arthur Cooper.

Article 236.

A Text-Book of Pathological Anatomy and Pathogenesis. By Ernst Ziegler, Professor of Pathological Anatomy in the University of Tübingen. Translated and edited for English Students by Donald MacAlister, M.A., M.B., Member of the Royal College of Physicians, Fellow and Medical Lecturer of St. John's College, Cambridge. Part I.—General Pathological Anatomy. London: Macmillan & Co. 1883.

This elementary work supplies a great want. We do not refer to the more prominent features of pathology already condensed and presented to the student in a form suitable for study, in the works of Dr. Green and other British writers. It is rather in the large amount of newer matter which it contains that this new publication excels its predecessors. By newer matter we of course imply, not the results of original research, but material not hitherto included in a text-book. The entire arrangement of the contents is also in accordance with new ideas rather than with precedent. The first section treats of malformations and monstrosities; the second of anomalies in the distribution of the blood and of the lymph; the third of retrogressive disturbances of nutrition; the fourth of progressive or formative disturbances of nutrition; the fifth of inflammation and inflammatory growths; the sixth of tumours; and the seventh of parasites. Little need be said concerning the third, fourth, fifth, and sixth sections: they treat of subjects well-known to the reader of pathological text-books, and are written in accordance with the latest researches, so as to be well up to their time. The chapter on tumours is ever held as the crucial test of a new work on pathology, according to the ideas of the amateur critic, who takes up a new work of this class at a medical bookseller's and 'makes' at once for the sarcomata and carcinomata, just as the Custom House officer is generally more particular about some one parcel than about the rest of a traveller's luggage. Searching in this work after such an example, we find that the tumour department is worthy of the most favourable criticism. We wish it were not deemed necessary to introduce terms like Rhabdomyoma, Leiomyoma, or Chloroma to the student; and we are of opinion that the portion of the section which treats of 'sarcomata of peculiar types' is rather suited for a work of reference than for a student's text-book. The part referring to cancer is condensed and simplified as well as can possibly be expected, when the great complexity of the subject is remembered.

The section on monsters will prove very useful to the student. A little more might have been said concerning malformations like cleft-palate and ectopia vesicæ, but more is promised in a coming volume relating to special organs. The second section contains some useful elementary knowledge regarding hæmophilia, lymphorrhagia, œdema, &c.

By far the most valuable part of the work is the section on parasites. The chapters on intestinal worms and on moulds are very satisfactory, but Chapter XXX. is a truly admirable elementary summary of the natural history and pathological influences of the Bacteria—the first simple, yet complete, account of the Schizomycetes that is to be found in a student's text-book, an account likewise acceptable for reference to every one who is interested in the great antiseptic theory. The surgeon practically concerned in Listerism cannot, at one bound, be possessed of the advanced knowledge of a Sanderson, a Bastian, a Lister, or a Watson Cheyne. To comprehend the words of these authorities he must first study the subject in an elementary form. This requirement is fully supplied, for the first time, by Drs. Ziegler and MacAlister. It is highly advisable that the surgeon should be clear about the distinctions between the sphærobacteria (*micrococcus* and *sarcina*); the microbacteria (*bacterium*); the desmobacteria or filobacteria (*bacillus*); and the spirobacteria (*spirillum* and *spirochæta*). At a glance the reader can learn which is which—and without such knowledge what is the use of reading or listening to speeches and discussions by learned experts? The following passage will also clear up much confusion in the minds of many who are uncertain as to what terms are synonymous, and what imply different groups or species. 'The Schizomycetes have been very variously named by different authors. Pasteur speaks of them as *végétaux cryptogames ou microscopiques, animalcules, champignons, infusoires, torulacées, bactéries, vibrioniens, monades, mycoderma.* In Germany the terms *monaden, vibrionen, mikrozyma,* and (by Klebs) *mikrospora* and *monadine* have been used. Billroth introduced the term *coccobacteria.* In England we have corresponding terms, with others like *monads, zymes, microzymes* (Sanderson), *microphytes,* &c.'

We may add *germs*, *micro-organisms*, *microbes*, and the German word *pilz*, pressed, like *champignon*, from the ranks of its general signification into this special service. It is highly advisable that the general medical public should bear in mind that all the above terms have been used to express the same thing, and are so employed in discussions on fermentation, ovariotomy statistics, and other matters within the scope of the great antiseptic theory. The Arab poets, in the palmy days of the caliphs, used to boast that their language possessed five hundred synonyms to express the word 'lion,' and one thousand to signify 'a sword.' 'Bacterienkunst,' as it is sometimes termed in Germany, seems to resemble Arabic in this particular, only science is not poetry, and in the former a multiplicity of synonyms is a pure nuisance. The confusion which they have caused may be remedied by a careful perusal of the thirtieth chapter of Dr. Ziegler and MacAlister's valuable text-book.

ALBAN DORAN.

ARTICLE 237.

The Contagiousness of Pulmonary Consumption and its Antiseptic Treatment. By J. BURNEY YEO, M.D., &c. Pp. 124. London: J. & A. Churchill.

IN these lectures the present aspect of consumption, in the light of the recent discoveries of Koch, is ably and lucidly considered. Dr. Yeo has no hesitation in affirming upon evidence which he brings in outline before his readers, that tubercle is an infective malady, and that its communicability is due to a specific organism, the tubercle-bacillus of Koch. Upon the question whether pulmonary consumption be a contagious disease, he withholds a complete answer as being as yet not justified by the facts in evidence. Dr. Yeo admits, however, the probability of the disease being contagious under certain conditions. But what these conditions are, must be cleared up by repeated investigations and experiments on animals. We think Dr. Yeo's suggestion a very good one, that the matter should be referred to the Collective Investigation Committee of the British Medical Association; and this, we are glad to hear, has been done. Having discussed the contagiousness of phthisis, Dr. Yeo occupies his second lecture with its antiseptic treatment by inhalations and residence in aseptic air. He gives exact directions for the use of such inhalations, and in an appendix he has collected some valuable notes on the principal antiseptic substances used in the treatment of phthisis. Dr. Yeo's lectures have so recently appeared in the pages of a contemporary, that we need not refer to them at greater length here. In their present form, however, with several appendices and added notes bearing upon the subject, the original lectures are much increased in usefulness and value. R. D. P.

ARTICLE 238.

The Germ-Theory of Phthisis Verified and Illustrated by the Increase of Phthisis in Victoria. By WILLIAM THOMSON, F.R.C.S. Pp. 95. Melbourne: Sands & McDougall. 1882.

IN reading this treatise, much allowance must be made for the author's sensitiveness to local and, it would appear, harsh and ungenerous criticism of former works, which has unfortunately led him to adopt a style of writing most repellent and tedious to busy and impartial readers. A man who has the spirit of earnest and fearless inquiry which is manifest in the matter of these pages, might well afford to take advantage of what was fair in criticism and to ignore all that was unworthy.

Mr. Thomson seems to have been stimulated to his search after the cause of phthisis by the debate on 'Tubercle,' which took place at the Pathological Society of London in 1873, which debate he characterises as 'grand,' but does not regard as having served any other useful purpose. Three years later (July 1876) he published a pamphlet on the 'History, Chemistry, and Pathogeny of Tubercle,' expressing most definite views as to the parasitic nature of tubercle; views which, recapitulated in the present work (p. 33), are certainly in accord with the advanced teaching of the present day. In 1876 the author defined the giant-cells of tubercle as being epithelial cells fused together within the alveoli under the morbid influence of the cause of tubercular disease; and in the giant-cells he (with others) found microzymes, which he then looked upon as the *materies morbi* of the disease. Mr. Thomson, if we rightly gather his meaning, conceived (1) that the microzymes, in process of their own nutrition, absorbed nitrogen from the nascent epithelium of the alveoli, thus devitalising these cells, and leaving them to undergo such further changes as the chemical affinities of their elements might determine: (2) that fresh infiltration or 'swarming' of the parasites into the pulmonary tissue led to secondary changes and to the febrile phenomena of phthisis: (3) that the parasitic microzymes escaped with the breath and sputa of phthisical patients, and becoming inhaled, particularly in the form of dust containing dried elements of sputa, communicated the disease to other people:* (4) that the disease phthisis had been imported into Australia by invalids from Europe: (5) that on the above grounds antiseptic inhalations were found useful, and an explanation was found 'how the antiseptic becomes directly curative of phthisis by arresting the parasitic cause of destruction.' Now short of the actual demonstration by colour-test and cultivation of a particular bacillus, to whose pranks in our organism one in seven† of us is alleged to succumb, Mr. Thomson may feel just pride in having anticipated by six years what is now likely to become, for a time at least, current doctrine. The statistical labours of Mr. Thomson have shown that the mortality from phthisis in Victoria is greatly on the increase, viz., from 7·9 per 10,000 living between the ages of 15 and 25 in 1871 to 9·9 per 10,000 living between the same ages in 1881, or, taking all ages, from 11·49 per 10,000 in 1871 to 13·90 in 1881 (see tables, pp. 22 and 26). Mr. Thomson is careful to point out that this mortality is not to be accounted for by any influx of dying visitors to the colony, but is largely due to an increasing death rate amongst Victoria-born persons. Thoroughly imbued with the belief that phthisis is a specific poison-disease, Mr. Thomson regards 'all idea about climate conferring an immunity from the disease as the most pernicious doctrine that could be inculcated.' He maintains that the disease is never of climatic origin; nor is it due to dampness of soil or depressing circumstances of life. Thus he regards the prevalence of phthisis amongst servant girls as due solely to the inhalation of the germ-laden dust of the bedrooms they have to sweep out. The well-known increase in the susceptibility to phthisis at the age of puberty is attributed by

* Abstract of former paper given at p. 33; also evidence given before Board of Inquiry referred to in Appendix.

† Koch, *Berl. Klin. Wochensch.*, Apr. 1882.

the author to the increase in the capacity of the air-vesicles, and widening of the openings of the ultimate air-tubes into them, that take place at this period of development, which allow more ready access of the bacilli. Hereditary influence means early or persistent exposure to the contagion. Sea-voyages may be useful in the treatment of phthisical maladies, not through their influence upon the general health, but so far as they subject the patient to the continued inhalation of a saline and slightly iodised air—an air unfavourable to the development of the parasites.

When we come to the cases quoted by Mr. Thomson we are certainly disappointed at the inadequate and hearsay nature of the evidence adduced. If a man get phthisis in a manner comparable to that in which he acquires lead-poisoning or typhoid or scarlet fever, then abundance of clear evidence should be forthcoming; and this evidence is yet required before we can accept all the deductions that have been drawn from the discovery of the tubercle-bacillus. More details would have been very welcome (and doubtless they might have been supplied) respecting the 1,400 deaths that have occurred at the Melbourne Hospital from phthisis in fourteen years, and in support of the statement that 'many hundreds of these deaths occurred in domestic servants, mostly of previously healthy working girls employed in cleaning the bedrooms.' It is not enough merely to state that the girls were so employed; a thorough and impartial inquiry should be made into all the circumstances attendant upon a mortality so astonishing and melancholy.

We think Mr. Thomson's work of much value as a contribution to one of the great questions of the day in pathology. Those who are wise enough to act up to every possibility whilst keeping their judgment calm, cannot fail to be strengthened in their preventive and therapeutical resources by a careful consideration of Mr. Thomson's work, provided they will not neglect the other causes of consumption which he disregards. ——— R. D. P.

ARTICLE 239.

The Annual Report of the Supervising Surgeon-General of the Marine Hospital Service of the United States for the Financial Year 1882.

THE Marine Hospital Service of the United States may be designated a great and good institution. Sailors above every class endure suffering patiently, and are less likely to impose upon any organisation for the relief of real and deserving necessity; and we find, from the excellent report of the Surgeon-General, Dr. J. B. Hamilton, that during the year ending June 30, 1882, no fewer than 36,184 persons have been afforded relief and medical treatment. Or, to show the results in another way, it is represented that 'since 1868 232,366 seamen have received relief in the hospitals and dispensaries,' and that 'no American sailor, if he apply, in any port of the United States, need fail of obtaining medical attention,' and in nearly every instance at the small ports, where 'contract' surgeons are appointed, the attendance is the best attainable at the port.

By the present method of appointment the medical officers enter the service as assistant surgeons after a rigid examination by a medical board. The examinations are free to all medical graduates from regularly chartered medical colleges, subject to the age qualification of between 21 and 30 years inclusive. Those passing the highest grade are first appointed, and the remaining successful candidates in the order of merit; after three years' service, and another successful examination, appointed passed assistant surgeons; then appointed surgeons, as vacancies occur, by seniority after examination.

Besides the treatment of sick and hurt seamen above alluded to, all the medical examinations for the Revenue Marine Life-saving and Lighthouse Services are made by officers of the Marine Hospital Service. It is interesting to know, also, that no less than '7,254 pilots were examined for colour blindness in 1880 and 1881, of whom 180 were colour blind, and these examinations were without cost to the vessels or pilots.'

In two instructive cases given to show the value of Holmgren's test, red and green were confounded, the two colours employed for signal lights. In passing, it might be remarked that blue and red would be much less likely to be mistaken the one for the other, a fact well worthy of consideration.

In the section on the 'Hygiene of the Merchant Marine,' it is stated that 'six cases of scurvy were admitted to the Contract Hospital at Astoria, Oregon,' and it was found, on inquiry, that 'no lime-juice was issued until the scurvy broke out, which was from 100 to 103 days after the vessel left the port of New York, and that no fresh meats were issued after the first day out.'

The occurrence of an outbreak of small-pox is said to have increased the expense of the service during the past year, and caused much trouble on account of the complicated sanitary regulations of certain ports. The total number of cases was 155, of whom 62 died. The establishment of a 'pest-house' at each hospital station will no doubt be soon carried out.

The misery, scarcely avoidable neglect, mismanagement, and bad consequences that must have existed prior to the inauguration of the Marine Hospital Service, may be more easily imagined than described. But, like many good things, it has its opponents, who more especially object to the tax levied for its support, and if their advice were taken the former unhappy state of affairs would soon be brought back again, and still require the application of some remedy. While the needs of the seamen of the U.S. Navy both in health and sickness are amply provided for, it is only just to accord a helping hand to the merchant marine; to legislate for it; to raise the standard of health of its *personnel*; to give succour to the sick, and those in circumstances of distress either by disaster at sea, poverty, or the disabilities of declining years after a life of toil and hardship. All these humane objects are espoused by the Marine Hospital Service, though its more especial mission is medical. Indeed, the conditions under which it originated were very similar to those that gave birth to the so-called 'Chatham Chest' in our own country, only that the further history of the latter is more complicated and much involved in official mystery.

From very early times, immediately after every great naval engagement, the tokens of war were everywhere to be seen in the pitiable case of the sick and wounded sent home from the scene of action, and but very inefficient aid was afforded by the State for their relief. Under these circumstances we are told that, in the year 1588, 'the Lord High Admiral and the principal officers of the navy, divers well-disposed masters, shipwrights, mariners, and seafaring men,' founded 'a perpetual relief for the hurt and maimed in the service of the Queen and

her heirs for ever. They voluntarily gave and consented to have defalcated from their wages, of all receiving 10*s.* a month or more, the sum of 6*d.* a month; of every gromett receiving 7*s.* 6*d.* a month, 4*d.* a month; and of every boy at 5*s.* a month, 3*d.* a month: such defalcation to be employed for ever towards the relief and maintenance of such hurt and maimed mariners, ships' carpenters, and seamen of the navy, or in any ship or vessel serving the State, either at sea or in harbour.' The pensions to the wounded designed from the Chest were originally intended to supplement, not to supersede, the State gratuities to wounded and worn-out seamen, and the out-pensions of Greenwich, which were established in 1763, were quite independent of the Chest, but in the year 1814 the funds of the latter were amalgamated with those of the former, and so ended the ancient institution of the Chatham Chest, the principal having then reached 1,355,400*l.*, a sum that would be far in excess of the most liberal expenditure in accordance with the utmost wishes of its benevolent founders. The subsequent history of the Greenwich Hospital, and the manner in which the conjoint funds above noticed have been appropriated, need no special mention here.*

The case so far is merely adduced to show that under proper advice and good management a sinking fund might be established by the merchant marine itself that would be sufficient in the lapse of a little time to sustain a system like the Marine Hospital Service, but emancipated from those restraints, necessary perhaps at present, but which must, nevertheless, withhold the wonted relief from many worthy cases that might otherwise cheer the heart of both recipient and administrator.

The funds of the service are derived from a tax of 40 cents. per month for each seaman, but only while his vessel is employed, a period supposed on the average not to exceed seven months in the year. So that, in point of fact, the annual amount defalcated is little more than half that which would naturally be represented by the Opposition.

The disbursements made from this revenue have very properly been placed under certain legal restrictions, on the principle that 'the coat must be cut according to the cloth,' and to obviate waste or misappropriation. But it has been shown that not only is the expenditure somewhat in excess of the means intended to meet it, but that in keeping with this necessitated economy the application of at least some deserving cases not quite fulfilling the conditions must needs be rejected. In Canada a similar system is in operation, but the tax is levied on the tonnage of the vessels and not on the seamen themselves per head, as in the United States. The amount, however, collected in this way has not yet proved equal to the expenditure, the deficit being made up by an annual appropriation made by Parliament.

There are eight relief districts in the United States, viz. 1, North Atlantic; 2, Middle Atlantic; 3, South Atlantic; 4, the Gulf; 5, Ohio; 6, Mississippi; 7, the Great Lakes; and 8, the Pacific.

Provision is also made in intermediate places for the reception of patients into civil hospitals at stated rates, and when possible they are attended by medical officers of the Marine Hospital Service. From all the above stations nosological returns are sent to the supervising surgeon-general, and they make up a considerable portion of the report with a list of surgical operations performed during the period. Next follow selected cases from hospital practice, including—

1. Seventeen cases of rheumatic effusion in joints successfully treated by aspiration. Reported by Surgeon Henry W. Sawtelle.

2. Notes on the Heatonian method for the permanent cure of hernia. Reported by Passed Assistant-Surgeon W. H. Heath. Of seventeen cases, twelve were cured, two improved, and one was unsuccessful, the accidental contact of the irritant fluid in the areolar tissue of the cord causing abscess.

3. Stab wound, followed by artificial anus. Operation and recovery reported by Assistant-Surgeon Henry R. Carter.

4. Aneurismal varix, involving the external iliac and femoral vessels. Ligature of the external iliac artery unsuccessful. A very instructive paper, with a woodcut of the parts concerned. By Assistant-Surgeon Charles E. Banks.

5. Cases of aneurism. (1) Ligature of the external iliac successful. Reported by Acting Assistant-Surgeon C. A. Wheaton; (2) Ligature of the femoral successful. Assistant-Surgeon Charles E. Banks; (3) Traumatic popliteal aneurism compression; gangrene, amputation. Surgeon C. S. D. Tessenden.

6. Epithelial cancer; removal; speedy recurrence and death. Surgeon Truman W. Miller.

Medical Cases.

1. Case of Molluscum fibrosum (with a microphotographic illustration). Acting Assistant-Surgeon A. C. Hamlin.

2. Small-pox—three cases, one of which had been previously vaccinated. Acting Assistant-Surgeon W. D. Stewart. Pp. 177 to 260 contain a record of fatal cases with autopsies of a varied and interesting character, and the report closes with an appendix, including a paper on 'The Hygiene of Steamboats on the Western Rivers,' vigorously written by Surgeon Walter Wyman, who speaks boldly in the interests of the man of colour against the heartlessness of his oppressors, and finally remarks, 'that the man who ships as ordinary seaman on a whaling vessel, bound for a three years' cruise in the Arctic seas, stands a greater chance of returning with his life and health than does he who labours for one or two cold winter seasons upon the deck of an Ohio river stern-wheel passenger steamboat.'

We have been much interested in the perusal of the report which reflects great credit on Surgeon-General Hamilton and the medical officers of the Marine Hospital Service under his supervision.

J.R.M.

Article 240.

A Manual of Hypodermatic Medication. The Treatment of Diseases by the Hypodermatic Method. By Roberts Bartholow, M.A., M.D., LL.D., Professor of Materia Medica and General Therapeutics in the Jefferson Medical College of Philadelphia, &c. Fourth edition, revised and enlarged. Philadelphia: J. B. Lippincott & Co. 1882.

This work is of such value to all engaged in practice that it is to be regretted that it is not more generally known in this country. The substitution of the term 'hypodermatic' for the familiar word 'hypodermic'

* For a more definite and precise account of the whole question the reader is referred to a lecture delivered before the British Medical Society at Plymouth, in August 1871, by Sir W. R. E. Smart, K.C.B., I.H.R.N., reported in the *Brit. Med. Jour.*, Oct. 28, 1871.

will probably not meet with general approval, but it is stated that it has received the sanction of some of our best authorities. It is, in any case, consistent with etymology. The opening chapter is devoted to a history of the subcutaneous method, and the author deals at some length with the question of the priority of the discovery. He states unhesitatingly that the credit is due to Dr. Alexander Wood of Edinburgh, who established his right to be regarded as the discoverer of the hypodermic method by using the syringe for injecting morphia, and by the publication of his experiments and their results. It was, however, reserved for Mr. Charles Hunter to demonstrate the important fact that the application of the injection to the painful spot was unnecessary, and that equally good effects follow its introduction at a different part. The author deals at some length with the form in which the drug is to be employed, and with the various instruments which have been recommended for its introduction. It is obvious that the medicine must be in perfect solution, for solid particles would not be absorbed and would act as irritants. The solution must be free from dirt and foreign matter, and should be neutral, or, at all events, should not present a decidedly acid or alkaline reaction. It must not be too concentrated, and, as water is quite harmless, the quantity of fluid injected is within certain limits a matter of no importance. It is found, too, that in preparing the solution distilled water is not essential, and that it is not even better than ordinary river, spring, or well water free from visible impurities. The objection to distilled water is that it rapidly becomes cloudy on exposure to the air. For the purpose of preparing extemporaneous solutions, powders of a given weight may be put up in advance, but it is not found practicable to accurately subdivide alkaloids given in hundredths of a grain. The author speaks unfavourably of the gelatine discs and tablets frequently recommended. He finds that they are slow to dissolve, and that the absorption of the gelatine is imperfect, so that local irritation is not uncommon. He much prefers the compressed pellets, or hypodermic tablets, prepared by Wyeth of Philadelphia, and considers that they are preferable in every respect. The objections to permanent solutions are many, and, even when most carefully prepared, they deteriorate by keeping. Their great enemy is the penicillium, which grows partly at the expense of the alkaloid, so that the solution rapidly loses strength. A solution long kept, although it may not be turbid, will when injected often cause an indurated and painful swelling, which remains for months, and may eventually suppurate. The addition of certain antiseptics to the aqueous solutions of alkaloids is an efficient method of preventing change. A minim of carbolic acid to the drachm of solution is not enough to act injuriously, and will maintain an antiseptic action for many months. Two to four grains of salicylic acid to the ounce will also prove effective, but it increases the irritation and smarting which attend the injection. Resorcin may be substituted for salicylic acid, as it is almost free from irritating properties. It is better, however, to make extemporaneous solutions than to rely on any formula, however well adapted it may appear to be to the purpose in view.

The instruments used for hypodermic medication vary much in appearance. Some are constructed of glass, others of celluloid or hard rubber, and others, again, of German silver, pure silver, or gold. The needle should be as small as possible, and should be lancet-shaped, without any groove or depression. It should be made of gold, with an iridium point. A constant complaint is that the piston becomes dry and will not work properly, but this may be obviated by having a small cap to fit the end of the barrel when not in use. There is one other point to which attention is very properly called, and that is, that needles which have been used for infected persons should not be used again.

The author gives the following list of

Remedies Administered by the Hypodermatic Method.

Source.	*Preparation for subcutaneous use.*
Opium	Morphia and its salts; codeia and its salts; narcein; apomorphia.
Belladonna	Atropia and its salts; homatropia.
Duboisia	Duboisin and its salts.
Hyoscyamus	Hyoscyamia and its salts.
Alcohol	Whiskey; brandy; distilled alcohol.
Chloral	Chloral-hydrate.
Chloroform	Chloroform.
Ether	Ether.
Nux Vomica	Strychnia and its salts.
Ergot	Aqueous extract (ergotin); sclerotinic acid; ergotinin, fluid extract.
Ustilago Maidis	Fluid extract.
Digitalis	Digitalin and its salts; tincture of digitalis.
Conium	Conia and its salts; conia and morphia.
Tabacum	Nicotin and its salts.
Aconite	Aconitia and its salts; napellin.
Physostigma	Extract; eserine and its salts.
Curara	Curara; curarin.
Hydrocyanic Acid	Hydrocyanic acid.
Colchicum	Colchicia and its salts.
Pilocarpus	Pilocarpin and its salts.
Muscaria	Muscarin and its salts.
Caffea	Caffein and its salts.
Cinchona	Quinia and its salts.
Carbolic Acid	Carbolic acid.
Resorcin	Resorcin.
Arsenic	Liquor potassii arsenitis.
Mercury	Corrosive chloride of mercury; peptonate of mercury.
Silver	Nitrate of silver.
Iodine	Lugol's solution; tincture of iodine.
Iron	Ferrum dialysatum; liquor ferri sulphatis.
Water	Aquapuncture.
Pepsin	Glycerite of pepsin.
Ammonia	Aqua ammoniæ.
Salines	Salts of sodium and potassium.

This is by far the most complete list we have seen. It is true caustic potash and permanganate of potash might have been mentioned, for both are used hypodermically in the treatment of snake-bite.

An account is given of the action and uses of each of the remedial agents employed hypodermatically. Under the head of Morphia the author says: 'There is no general agreement as to the salt of morphia which is best; but, as the sulphate is most

soluble, and when neutral is not more irritating than any other salt, it should be preferred.' He recommends Magendie's formula, containing sixteen grains of the sulphate to an ounce of water. A detailed account is given of the use of hypodermic injections of morphia in those diseases in which its employment is indicated, and there is an useful chapter on the opium or morphia habit and its treatment.

Dr. Bartholow discusses at some length the extraordinary discrepancies in the statements of various authorities as to the quantity of atropia which may be used subcutaneously. He considers that gr. $\frac{1}{48}$ is the maximum dose which should be given in an ordinary case, but he adds that great differences are met with in susceptibility to atropia influence ; for example, children bear a proportionately larger amount than adults, women are more susceptible than men, and persons of light complexion are more easily influenced than those who are dark. A good account is given of the use of hypodermic injections of atropia in locomotor ataxy, chronic meningitis, delirium tremens, neuralgia, sciatica, tetanus and hydrophobia, epilepsy, asthma, sea-sickness, colic, cholera, spermatorrhœa, and a variety of diseases, but, curiously enough, no mention is made of its employment as a remedy for the night-sweating of phthisis. Homatropia receives due attention, and the author considers that it deserves a further trial in the treatment of various diseases. Under the head of Duboisia, it is stated that it may be substituted for atropia in all conditions in which the latter is now employed. The account of pilocarpin is not so full as we should have liked, but we quite understand that it is difficult to treat every drug with equal completeness. The dose is said to be from gr. $\frac{1}{6}$ to $\frac{1}{2}$, and we are told that it is rarely necessary to exceed a quarter of a grain. We must admit that we usually fail to get the full physiological action from the quarter grain. Pilocarpin undoubtedly varies much in purity, and Dr. Bartholow must have been fortunate enough to secure a specimen of the alkaloid containing little or no jaborin. Speaking of apomorphia, he says the solution rapidly changes, becoming greenish and 'unfit for use,' and recommends that it should be kept in the form of a powder and prepared as required. It is true the solution assumes a green colour very quickly, even in a few hours, but that does not render it unfit for use. We have now a 1 in 50 solution of hydrochlorate of apomorphia prepared more than a year ago, and it is as active as it was when first made.

We have given a very brief account of the contents of this valuable work, and can only say in conclusion that it will well repay careful study.

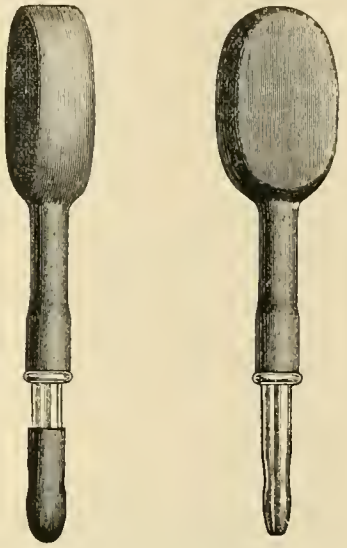
WILLIAM MURRELL, M.D.

NEW INVENTIONS.

Article 241.

MR. BALMANNO SQUIRE'S URETHRAL SYRINGE.

THE advantages of this syringe are as follows. It is easily worked with one hand ; the other hand being left free to close the mouth of the urethra around the nozzle. It can be completely emptied (by pressing the sides together), and completely filled (by relaxing the pressure). Moreover, its fluid capacity is precisely that which is necessary to distend fully, but not unduly, the male urethra with fluid. Consequently, no air-bubbles can be injected by it into the urethra, and no fluid into the bladder. Its flat shape and small size enable it to be carried easily in the waistcoat pocket. A supply of liquid, enough for one injection, may be carried in the



syringe. The nozzle is provided with a rubber cap which takes off and on ; so that the syringe, filled with a supply of solution, may be carried safely in the waistcoat pocket. The manufacturers of this instrument are Messrs. Ingram & Co.

Article 242.

AN IMPROVED MEANS OF OBLIQUE ILLUMINATION—A CORNEAL CONDENSER.

DR. E. G. LORING, of New York, writes in the *New York Medical Record* of Nov. 25, 1882, as follows.

Since the introduction of the elevated railroads, the frequency with which foreign bodies are found impacted in the cornea has increased so much that hardly a day passes that the ophthalmic surgeon is not called upon to remove one or more of these painful and oftentimes dangerous particles. This may occur not only at any hour of the day, but of the night as well, and in this latter case it is extremely difficult, if not impossible, for the surgeon, without the aid of an assistant to hold a condensing lens, to accomplish his object. This difficulty has, it is true, been obviated in a great measure by an ingenious contrivance described by Dr. Noyes, which consists of a lens so mounted that it can be worn by means of a spring clamp on the end of the first finger on the left hand of the operator. The amount of movement, however, is small, while to focus the eye successfully with the index finger so encumbered, and at the same time keep the cornea illuminated, is a difficult operation, and requires considerable practice and skill.

Mr. J. E. Adams, of London, described in the *Lancet*, Feb. 7, 1880, an useful and ingenious little instrument, which consists of two lenses attached to a head-band, the plate of which is worn in the centre of the patient's forehead.

The modification of that idea consists, as shown in the drawing, of an arm, broken at the various

points by ball-and-socket joints, so as to give a perfectly free adjustment to the lens in any direction, and at any distance up to the extreme length of the arm. This leaves both hands of the surgeon unencumbered, permits the use of fixation forceps if necessary, and does away with the necessity of an assistant to hold the lens.

The arm is attached to an elastic head-band, precisely like the head-band of an aural or laryngoscopic mirror. When in use, the band is slipped over the head of the patient in such a way that the hard rubber support comes at the temporal region and on the side of the eye to be illuminated, the lens then being swung into the position desired. By having the plate at the temporal region instead of in the centre of the forehead, as in Mr. Adams' instrument, and the lamp well at the side instead of directly in front, we get rid of annoying reflections of the lens in the cornea, and avoid the irritating effects of the light from a strong condensing lens thrown directly through the pupil upon the patient's retina. If the lens be so arranged as to be a little within or a little without its focal length from the eye, the section of the cone of light is large enough to keep the cornea covered, even if the eye make considerable excursions; while, as the lens is attached to the patient's head, this latter can be moved to a considerable degree without displacing the illumination from the eye. I have found it of great service in operating upon delicate membranes in the pupillary space, as it gives a much steadier illumination, and one which is more easily controlled than when an assistant holds the lens.

By removing the lens from the clip and supplying a mirror, the instrument, from the character of its joints and the mutability of its position, can then be used as a fixed ophthalmoscope for the upright image, and can thus be used in demonstrating the fundus to a class or in making a sketch of it without the observer being compelled to take up and lay aside the instrument at every look; or the upper half of the ordinary ophthalmoscope can be inserted instead of a simple mirror, and then any optical combination that the refraction of the observed eye may require can be obtained.

I have had a band made which carries two lenses, one on a shorter arm, which is then used as a magnifying lens, but the single one answers every purpose, and for ordinary occasions is the most convenient.

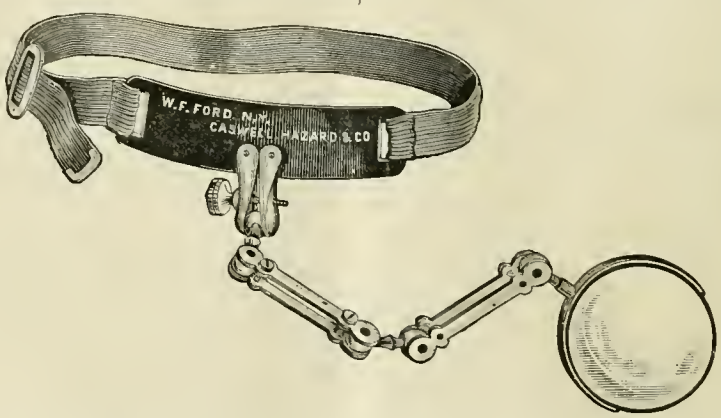
The instrument is also very useful in magnifying small hairs, thus rendering their detection and removal much easier, or in performing any operation at night or whenever the light is poor. When, however, the light is sufficient, and only an increased enlargement is desired, the surgeon, by wearing the band on his own forehead and extending the arm to its utmost, can obtain a large amount of magnifying power, while by slight movements of the head he can successively inspect and keep in front any portion of the anterior surface of the eye or lid.

The instrument can be obtained of W. F. Ford, New York, and A. Keune, New Haven R. R. Building, Franklin Street, New York.

Article 243.

A NEW ASPIRATOR.

Professor Picot, of Bordeaux, has had constructed by M. Creuzan, surgical instrument-maker, of the same city, a new aspirator, which he invented to obviate the inconveniences of Dieulafoy's aspirator, and also the disadvantages created by the necessity of first making a vacuum in the flask of Potaim's apparatus. The apparatus illustrated is of extreme simplicity, and is composed of an India-rubber flask, the pressure of which, by means of a system of special valves, allows the construction of a pump, which is at once an aspirator and a force-pump. On this



flask, as the illustration shows, there is fixed a glass receiver, into which the aspirated liquid is precipitated, and which allows the immediate verification of the nature of the fluid. Valves which guarantee the working of the apparatus are placed in the cylinders A and I. It was especially for puncture of the pleura that Professor Picot had constructed this apparatus, which has also the considerable advantage of not allowing the introduction of air into the pleural cavity or into any but the one punctured. It is obvious that this instrument will be found useful in all cases where the practitioner wishes to make an aspiration in a cavity containing liquid, and that it is practicable to use it to evacuate, protected from contact of the air and with all the power given by aspiration, effusions of the various serous cavities, the fluid of hydatid cysts, that of deep-seated abscesses, &c. Likewise the instrument, if reversed, becomes, instead of an aspirator, an excellent injector. It allows of washing-out as much at the surface of wounds as in the depth of the tissues or in normal or pathological cavities. Professor Picot states that he has used this instrument in his practice during three months for making a certain number of aspirating punctures of the pleura, in presence of his class. It has acted with the greatest ease and

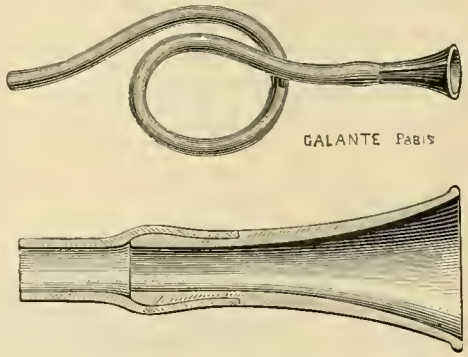
regularity, and its action is so simple that the same person may, whilst keeping the trocar in place, work the instrument without any fatigue, and without being preoccupied with anything but to watch the effects produced on the patient by the evacuation of the pleuritic liquid. He therefore believes that, for the practitioner who cannot always command assistance on which he can rely, this instrument will be very valuable, since it allows working without any

assistance, except the person whose business it is to hold the basin into which the aspirated liquid is received. In order to work this apparatus, whether it be intended to use it as an aspirator or as an injector, it suffices to direct the end provided with the glass reservoir in the direction of the liquid to be aspirated. In order to clean it, it is sufficient to pass a current of carbolised water through it and to wipe the valves.

Article 244.

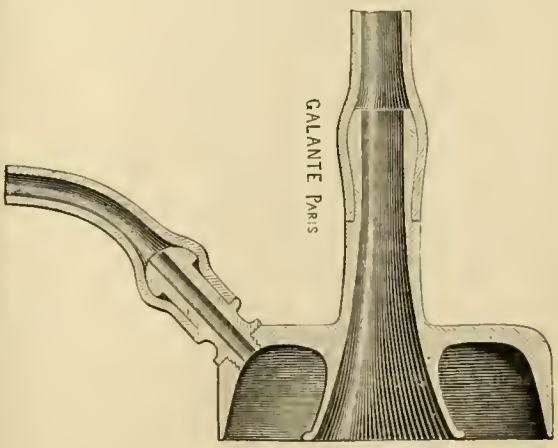
A NEW HOLLOW FLEXIBLE STETHOSCOPE.

The flexible stethoscope invented by Dr. Constantine Paul, of Paris, is fairly well known to the profes-



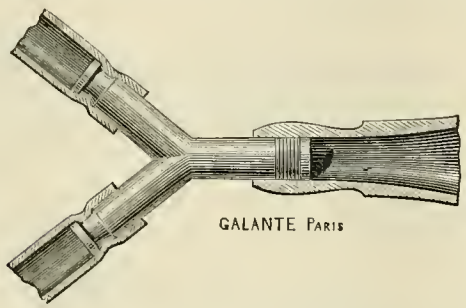
sion. It is composed of a vulcanised India-rubber tube 45 centimetres in length, which gives complete

facility of action both to physician and to patient. The free end is intended to enter into contact with the



auditory canal; with the other is connected a bell-shaped ivory chest-piece, which the medical man

places over various points of the chest, whilst remaining upright without congesting the brain or tiring the loins. This arrangement allows lengthened auscultation, so as to hear well the rhythm of the heart. The following modifications have been made in this instrument by M. Emile Galante. A hollow circular case of a given capacity surrounds about two-thirds of the height of the chest-piece, of which the size and form have been carefully retained. To one point of the surface of the hollow case is connected a tube which terminates in a small India-rubber flask, which thus transforms it into an annular sucker



serving to fix the stethoscope. The stethoscope is arranged for uni-aural or binaural auscultation with the help of a metallic adjustment. In consequence of the exact adaptation of the chest-piece to the skin with an unvarying pressure, and of the suction-apparatus, which forms an additional hollow cavity, the sound which it is wished to hear assumes a remarkable intensity and clearness.

Article. 245.

MITCHELL AND MUIL'S CHARCOAL BISCUITS.

The charcoal biscuits recently introduced by Messrs. Mitchell and Muil, of Aberdeen, form an admirable mode of administering this valuable remedy. They are wonderfully free from grittiness, and by the taste alone can hardly be distinguished from Osborne biscuits. They will prove of much value in the treatment of acidity, flatulence, and other disorders of the digestive organs. We have heard them praised as a remedy for piles.

MISCELLANY.

Weight of Women's Clothes.—In relation to rational dress the dress reformers have, we are glad to see, been advised to give attention to the absurd fashion now prevailing as regards women's dress, and especially at this time of the year, when, in addition to their ordinary clothes, ladies cover themselves with heavy mantles of fur, &c. Many women complain of feeling tired after a short walk, whilst they are really carrying a weight which would soon tire a strong man. Their waists are encircled with a belt or hoop, to which a load heavier than a felon's chains is attached, and the shoulders and chest are compressed by an additional burden. Breathing is laboriously performed, and the contents of the trunk and pelvis are thrust down with a force which if represented in pounds would occasion considerable surprise. It would be a matter of great interest if medical men would ask their female patients to ascertain precisely the total weight of the clothes they wear in-doors and out.

How to Hang.—In a recent paper on this subject, Dr. E. M. Hammond, of New York, produces evidence that the common practice of jerking the body by the neck with a view to dislocation is wrong, useless, and barbarous. In hanging, death takes place either by asphyxia or by apoplexy, or by both. If the cord be loose or too high up on the neck, a little air may still reach the lungs, and life be prolonged till the slower death by apoplexy takes place. The object should be to produce immediate asphyxia, with a noose adjusted so as to close the windpipe at once. Usually there are both apoplexy and asphyxia. Dr. Hammond had himself partly strangled in a chair. A towel was passed round his neck and the ends twisted together by a medical friend, while another friend stood in front to watch the face and make necessary tests. As the twisting proceeded Dr. Hammond first noticed a sensation of warmth and tingling, which began with the feet and spread over the body; vision partly disappeared, but there was no appearance of coloured lights. The head felt as if it would burst, and there was a roaring in the ears; consciousness continued, and Dr. Hammond could tell his friend whether he suffered pain from the knife-thrusts being made into his hand. In one minute and twenty seconds from the commencement sensibility was abolished. In another experiment, sensibility ceased in fifty-five seconds. A knife-thrust, sufficient to draw blood, caused no sensation whatever. Dr. Hammond considers that the proper way to hang is to stand the criminal on the ground and adjust the noose carefully round the neck below the larynx; then raise him by pulling on the rope, which should pass over a pulley above, and he should be allowed to hang for thirty minutes. If he be let fall through a trap, or lifted suddenly from the ground, the noose is almost certain to be displaced, and death to be less sudden than it should be. The rope should be soft and flexible, so as to fit closely to the neck; probably one of cotton or flax would be preferable to the usual hempen cord. In hanging by the method indicated, sensibility would cease almost immediately after suspension, and much physical and mental suffering would be obviated. In the case of persons weighing under 150 lbs., it would be well to attach a weight to the feet to insure sufficient traction of the cord. Dr. Hammond notices the mistaken idea that dislocation of the neck causes instant death; in some cases even recovery has taken place. Even where death does occur, it is no more instantaneous than when asphyxia is accomplished, and there is no greater freedom from convulsions. Any convulsions observed in the other case may be regarded as no more evidence of pain than are the movements of a decapitated chicken.

The Influence of Rarefaction upon] Blood-Pressure.—Dr. A. Fraenkel has read a paper before the Physiological Society of Berlin on certain experiments which he has made, in conjunction with Dr. Geppert, to determine the influence of a rarefied atmosphere upon the animal organism. In addition to the general phenomena and the behaviour of the gases of the blood in animals which breathe in a rarefied atmosphere, investigations were made as to the influence of rarefaction upon blood-pressure. The blood-pressure was read off upon a manometer, one arm of which communicated through the side of the box (in which the animal was kept exposed) with an artery of the animal, while the other arm was in communication with the general cavity of the box. When the atmospheric pressure sank to half the normal amount, the blood-pressure showed no change; when the pressure sank to a third of an atmosphere, a small rise took place in the blood-pressure. This rise, however, passed away during the sleep that occurred under the influence of this amount of rarefaction, and the pressure became normal again. When the air was still further rarefied till the pressure was as low as one-quarter of an atmosphere or less, the pulse became weak and small, the blood-pressure went down, and then, if normal quantities

of oxygen were not quickly restored, the heart stopped. The chief gain of the whole investigation was the definite determination of the influence of a rarefied atmosphere upon metastasis (Stoffwechsel), upon which question only few and contradictory data exist. The investigators agreed in general with M. Paul Bert in regarding the effect of a rarefied atmosphere as inducing a chemical change which was brought about by a diminished supply of oxygen. The amount of urea secreted in the twenty-four hours was taken as the measure of metastasis. During a lengthened period of observation on those days in which the animals thus experimented upon had the same amount of food, the quantity of urea secreted in the twenty-four hours remained constant. Nor was there any alteration in the amount of urea when they were exposed to variations of pressure down to half an atmosphere. On the diminution of the pressure to one-third of an atmosphere, at and under which pressure the amount of oxygen contained in the blood is markedly diminished and the animal falls into a deep sleep, there was—after this degree of rarefaction had lasted several hours—a very remarkable increase in the amount of urea. This increase did not occur till the next day in the case of animals which had been fed, whereas it occurred on the day of the experiment in the case of those animals which were kept hungry; but it lasted in all cases over a couple of days after the experiment. Dr. Fraenkel's belief is that the rarefaction influences metastasis by depriving the blood and the tissues of some of their necessary oxygen, and that this want of oxygen entails an excessive destruction of albumen; the constituents of which are in part deposited as fat, and in part are changed into urinary products. Besides the increased elimination of urea, fatty degeneration of tissues (*e.g.* of the heart) is observed when the system is in want of oxygen.

Giacomini's Process of Preserving Brains.—Mr. A. W. M. Robson (in the *British Medical Journal*) recommends the following process for preserving brains. The fresh brain in its membranes is placed in a saturated solution of chloride of zinc, in which it floats, and must be turned over two or three times a day. After forty-eight hours, the membranes must be removed without taking the organ out of the fluid. Allow it to remain in this fluid until it ceases to absorb, as shown by its remaining at the same level, and not sinking. Then remove it, and plunge it in alcohol of commerce, where it must remain for a period of not less than twelve days, during which time the spirit should be changed two or three times. When removed from the alcohol it is to be placed in glycerine of commerce, to which 1 per cent. of carbolic acid may be added. At first it floats in the glycerine; but, as the spirit evaporates, and the glycerine penetrates it, it gradually sinks to the level of the surface of the fluid, when it may be removed, put aside to dry for a few days, and, lastly, coated with several layers of gum-elastic varnish, or marine glue diluted with a little alcohol.

Obesity and its Treatment.—Ebstein, of Wiesbaden, describes a new dietetic method for the relief of obesity. He does not believe in 'Bantingism,' and states that it produces inanition which may be injurious. Dr. Ebstein contends that a diet of albuminous and fatty matter tends to check deposit of fat, and that it is the sugars and starches which are to be left out in an anti-fat regimen. He gives bread, however, and green vegetables, peas and beans, but no potatoes. The addition of fat to the diet list has the advantage that it produces satiety sooner and the patient does not eat so much.

Lantern Fish.—The latest submarine explorations made on board *Le Travailleur*, have brought to light an extremely curious fact which none of the scientists who have hitherto endeavoured to guess what might be the nature of life in the sombre depths of the ocean have ever thought of. These abysses are not only peopled by foraminifera and infusoria, as has been supposed, but numerous species of fish analogous to those which inhabit the surface of the water are there found possessing very curious anatomical peculiarities and novel organs. These organs are transparent plates covered by the skin and filled with a liquid capable of becoming luminous under the influence of the encephalon. It hence results that these vertebrata which inhabit regions where the sun never penetrates, and where consequently eternal darkness reigns, possess a kind of dark lantern, which they can light at will. It should be added that one peculiarity has long been taken cognisance of, which is that a majority of the zoophytes which carpet the bottom of the sea are naturally phosphorescent.

A Blind Cat.—An interesting account of a cat which became quite blind, rather suddenly, from cataract, when about four years old, is given by Mr. Hovey in the *Scientific American*. At first the cat would sit and mew most piteously; and when he tried to move about he met with all conceivable mishaps—ran against walls, fell down stairs, stumbled over sticks, &c. If placed on the top rail of a fence, he would traverse its whole length, seeking vainly for a safe place to jump off. On being called, he would run about in a bewildered way. Ere long, however, Dido (so-called, irrespectively of gender) showed a power of adaptation to altered conditions. He became able to run down stairs at full speed, turning into the hall after the last step. In this process he went to one side on the top step till he felt the balusters touch his whiskers, and by these he was guided. One by one he made each familiar path a study, noted the situation of each door, &c., and with such success that it often seemed as if sight had been restored; but if any unexpected obstacle were placed in his way he showed, by running against it, that he was still quite blind. Dido seems as eager for war as he formerly was, and he even goes abroad in quest of adventures. His value as a monser does not seem to be in the least diminished. Put into a closet where rats were suspected, he was found in the morning mounting guard over a large rat he had killed. Dido's sense of smell is by no means acute; yet he uniformly chooses the shortest road home, without reference to the path he may have taken in leaving the house. Once, when the ground was thickly covered with snow, Mr. Hovey took Dido out a considerable distance, and, after making a number of turns to bewilder him, tossed him adrift and awaited results. The animal turned his head in various directions and mewed piteously; but, finding he was left to his own resources, he stood motionless for about a minute, and then, to the author's surprise, made his way directly through the untrodden snow to the house-door.

The Value of Gold Medals.

A golden medal was voted to me
By a certain Royal Society.
It was not a thing whereat to scoff,
For sixty guineas was the cost thereof.
On the one side the head of the King you might see,
And on the other was Mercury.
But I was scant of worldly riches,
And moreover the Mercury had no breeches.
So, thinking of honour and utility too,
And having modesty also in view,
I sold the medal—why should I not?
And with the money which for it I got
I purchased this silver coffee-pot;
Which I trust my son will preserve with care,
To be handed down from heir to heir.
These verses are engraven here
That the truth of the matter may appear,
And I hope the Society will be so wise
As in future to dress their Mercuries.

(*Written by Southey, when on a Visit to Greta Hall.*)

An Assuager of Thirst.—Sir Joseph Fayrer, Medical Officer of the Secretary of State in India, has

reported his experience in the use of coca-leaves, chewed during mountain-climbing, as a means for preventing or relieving thirst. His experiment consisted in the distribution of about eighty grains of the leaf to each one of the four guides and porters who accompanied him. During the ten hours consumed by the excursion, no water and but a limited quantity of wine were consumed. They drank no tea nor coffee, nor did they use ice or snow. Nevertheless, the chewing of the coca appeared to furnish great relief from thirst, and to enable them to make the trip with comparative comfort.

Poisoning by Strychnine.—A criminal case tried some time ago in Germany having shown the inadequacy of scientific notions as to strychnine poisoning and detection of the poison in putrefying bodies, four *savants*—viz., Dr. Ranke, a physiologist, and MM. Buchner, Gorup, Besancz, and Wislienus, chemists—have lately made a fresh experimental study of the subject. Seventeen dogs were caused each to swallow a pill of 0·05 gramme nitrate of strychnine. The salient features of the poisoning were these. The time between taking the poison and the first tetanic attack varied widely, from five minutes to eighty-three minutes; the average was eighteen. So did the time between taking the poison and death; the average was thirty-five minutes. On the other hand, the interval between the first symptoms and death varied little. It never reached half an hour, and the average was eleven minutes. Race and weight had no influence on these intervals. Immediately after death there was complete muscular resolution; rigidity set in in twenty-one minutes after death at the earliest, ninety-seven minutes at the latest; average fifty minutes. It began with the fore limbs. Its duration was the same as in other kinds of death; sixteen hours after death it was rapidly diminishing. The tetanic fits were few, two or three generally, and death always came suddenly during a fit. The fits lasted one minute on an average. Next as to search for the poison in bodies exhumed after 100, 130, 200, and 330 days. Using Stas's method (improved), the authors were unable to find strychnine, even where 0·1 gramme had been given to each dog, a fatal dose even to a man. But, even in the dogs longest buried, the presence of the poison might be assumed from the bitter taste of the product obtained. The physiological reaction is infinitely more delicate. The extracts were dissolved in cold water and injected under the skin of frogs and in a few minutes these animals had violent tetanic spasms. The action was more pronounced the shorter the time the animal furnishing the extract had been buried. The nature of the ground, permeable or otherwise, where the dogs were buried, did not appear to influence the physiological reaction of the strychnine in the extract. The extracts from very putrefied bodies produced in the frogs a torpor, with weak and sluggish movements of the heart, which might retard and partly mask the action of the strychnine. A critic has suggested that those alkaloids, called ptomames, found in dead bodies, might even in some cases exaggerate or simulate the action of strychnine. While this action of putrid matter is most conspicuous with extracts from the intestine, the action of strychnine is most pronounced with extracts from the liver and spleen. Professor Dragendorff has objected to the method the authors adopted to liberate the alkaloid—viz., agitation with ether, then with chloroform and amylic alcohol; and he has indicated a superior method, enabling to detect 0·000001 gramme of strychnine, while the physiological researches require at least 0·000004 gramme. Thus he considers chemical analysis the more delicate method.

A Prize for the Prevention of Blindness.—The fifth international Congress of Hygiene, which will meet at The Hague in 1884, will award the prize of two thousand francs (80*l.* sterling) offered by the London Society for the Prevention of Blindness to the author of the best essay written in English, French, German, or Italian on the causes of blindness and the practical means for preventing it. Besides this prize the International Society for the Improvement of the Condition of the Blind reserves to itself the right to award a second prize of one thousand francs (40*l.* sterling) or two prizes of five hundred francs (20*l.* sterling) each and a silver gilt medal with a diploma, should it see fit, to such of the essays as should, in the opinion of the international Jury for the principal prize, be deserving of it; the last-mentioned prizes will be distributed at the centenary festival of the first blind Institution founded by Haüy, which will take place in Paris in 1884. The fourth International Congress of Hygiene, which met at Geneva in September 1882, has adopted for this competition the following programme, as prepared by the London Society for the Prevention of Blindness:—1. The study of the causes of blindness; (*a*) Hereditary causes; diseases of parents, consanguineous intermarriages; (*b*) Infantile eye diseases; various inflammations of the eyes; (*c*) School period and time of apprenticeship, progressive short-sightedness, &c.; (*d*) General diseases; diatheses, various fevers; chronic poisoning, &c.; (*e*) Trade influences; wounds and accidents, &c.; sympathetic ophthalmia; (*f*) Social and climateric influences; contagious ophthalmias; unhealthy habitations; defective lighting, &c.; (*g*) Neglect of treatment and bad treatment of eye affections. 2. The study of practical preventive means:—(*a*) Legislative means; (*b*) Hygienic and professional means; (*c*) Educational means; (*d*) Medical and philanthropic means. The international Jury, elected by the Geneva Congress, for the purpose of judging the essays consists of—Holland: Dr. Snellen, professor of ophthalmology, Utrecht. Germany: Dr. H. Cohn, professor of ophthalmology, Breslau; France: Dr. Fieuzal, physician to the Hospice des Quinze-Vingts, Paris; Dr. Layet, professor of hygiene, Bordeaux. Italy: Dr. Reymond, professor of ophthalmology, Turin; Dr. Sormani, professor of hygiene, Pavia. England: Mr. Streatfield, professor of ophthalmology, University College, London; Dr. Roth, honorary secretary and treasurer (*pro tem.*) of the Society for the Prevention of Blindness, London. Switzerland: Dr. Dufour, of the Ophthalmic Hospital, Lausanne; Dr. Haltenhoff, lecturer on ophthalmology, Geneva, and secretary to the Jury; Dr. Coursserant, oculist, Paris; and Dr. Berlin, professor of ophthalmology, Stuttgart. Those essays to which prizes have been awarded will become the property of the Society for the Prevention of Blindness, and of the International Society for the Amelioration of the Condition of the Blind, who will be at liberty to publish them in whole or in part, in several languages, in order to make them useful in the way they consider best. The (inedited) manuscripts for competition are to be sent to Dr. Haltenhoff, Geneva, not later than March 31, 1884. Every manuscript has to be distinguished by a motto, which is also to be written on a sealed envelope containing the name, Christian name, titles, and address of the author. The envelopes will not be opened until after the award of the Jury.

Wilks on the Evolution of the Stethoscope.—Dr. Samuel Wilks in the *Lancet*, Nov. 1882, p. 882, gives an account of the evolution of the stethoscope. He shows how the present forms are derived from the first instrument used by Laënnec in 1816. Laënnec rolled a quire of paper into a kind of cylinder, and applied one end of it over the patient's heart, the other to his own ear. Finding the success of this plan, Laënnec made various instruments of wood, glass, metals, &c., but finally employed a cylinder of wood an inch and a half in diameter and a foot long, perforated longitudinally by a bore three lines wide, and hollowed out into a funnel shape at one of its extremities; after a time the sides were cut out to make the instrument lighter and more elegant, and later on a difference was made in the size of the two ends; so that the modern instrument, though not much like a block of wood itself, can easily be traced from one. The flexible stethoscope has also been known for many years, for in 1829 Mr. Comins of Edinburgh wrote an account of a flexible instrument, which 'can be used in the highest ranks of society without offending fastidious delicacy.'

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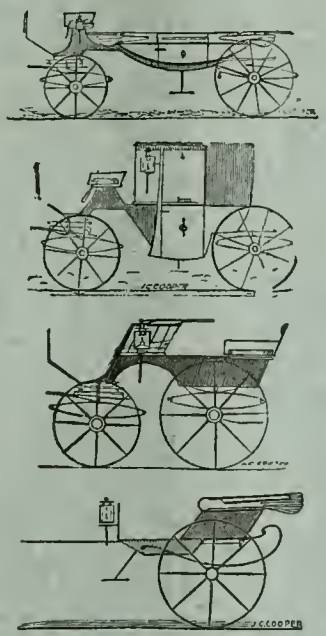

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